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ORGANIZATION OF THE ARMY AIR ARM
1935-1945

USAF Historical Division
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Air University

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# ORGANIZATION OF THE ARMY AIR ARM 1935-1945

USAF Historical Division
Research Studies Institute
Air University
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# Joreword

The year 1935 marked the establishment of the General Headquarters Air Force, the first official recognition that the development of effective airpower necessitated authority for independent action. The purpose of this monograph is to show the organizational growth of the Army air arm from 1935 to September 1945 and to trace the ideas and influences that affected its development. Most significant of these was the continuous effort to attain an autonomous air force, one with a large degree of control over its own affairs internally and the necessary voice in determining its operational activities. Important internal developments included the establishment and implementation of an Air Staff, the application of management devices, the improvement of programming methods, the consolidation of AAF Headquarters offices, and decentralization of command responsibilities.

This study was prepared by Dr. Chase C. Mooney and revised by Dr. Edward C. Williamson. Like other Historical Division studies, additional information or suggested corrections will be welcomed.

### Charts

		Page
1.	Relationship between Office, Chief of Air Corps and General Headquarters Air Force, 1935-1941	6
2.	Organization of the Office, Chief of the Air Corps, 1935-1941	12
3.	The Office, Chief of the Air Corps, November 1935	13
4.	The Office, Chief of the Air Corps, January 1937	15
5.	The Office, Chief of the Air Corps, September 1938	16
6.	The Office, Chief of the Air Corps, August 1939	17
7.	The Office, Chief of the Air Corps, December 1940	18
8.	The Office, Chief of the Air Corps, December 1941	21
9.	Army Air Forces Organization, 24 December 1941	27
10.	Proposed Policy Staff Reorganization, 1941-1942	28
11.	Army Air Forces Organization, 9 March 1942	30
12.	Army Air Forces Organization, 29 March 1943	44
13.	Organization of the Army Air Forces, 15 September 1945	64
14.	Air Staff Divisions, 15 September 1945	65

#### Contents

Chapte	r	Page
Ι	THE ATTAINMENT OF AUTONOMY WITHIN THE WAR DEPARTMENT	1
II	INTERNAL ORGANIZATION AT HEADQUARTERS,	
	1935-1942	11
III	DEVELOPMENT OF THE AIR STAFF	23
	The Policy Staff	23 29
IV	APPLICATION OF THE COMMAND AND BUREAU	
	PRINCIPLES	33
V	THE MARCH 1943 REORGANIZATION	40
VI	DEVELOPMENT OF MANAGEMENT CONTROL AND	
	PROGRAM PLANNING AGENCIES	46
	Management Control	46
	Program Planning and Control	49
VII	ACQUISITION OF NEW FUNCTIONS	53
VIII	CONSOLIDATION	57
IX	POST-HOSTILITIES ORGANIZATION	61
X	CONCLUSION	68
	FOOTNOTES	70
	BIBLIOGRAPHY	79
	APPENDIX	81
	GLOSSARY	85
	INDEX	86

1

# The Attainment of Autonomy Within the War Department

RAPID DEVELOPMENT of the range, speed, and power of the range. and power of the military airplane necessitated continuous adjustments in the organization of the Army air arm. This arm originated in 1907 as the Aeronautical Division (composed of one officer and two enlisted men) in the Office of the Chief Signal Officer. In 1914 the creation of the Aviation Section of the Signal Corps by congressional action was a step toward higher status in the Army. The changing concept of employment of the airplane in World War I was instrumental in removing aeronautical matters from the Signal Corps and creating the Air Service in 1918. By 1926 the role of aviation in the field of military science was sufficiently important to warrant the designation of the air arm as the Air Corps. In recognition of its new status the Air Corps was accorded sectional representation on the War Department General Staff. At the same time the office of Assistant Secretary of War for Air was created. Seven years later, however, this office was abolished as a result of economy measures by President Franklin D. Roosevelt.

Several tests in the 1920's and early 1930's demonstrated that the airplane was potentially a formidable war weapon. Airmen stressed the results of these tests in their efforts to achieve their long-sought goal—the organization of a compact, mobile air arm ready to meet the enemy on M-day. Of the many boards and committees which had studied the question, only the Crowell Board in 1919 and Lampert Committee in 1924 had recommended that airpower be employed other than as an auxiliary of the land and sea forces. Constant pressure by the airmen, increasing recognition of the importance of aerial warfare, and the ominous

trend of world events brought about the appointment of the Baker Board in April 1934.\* This board was, among other matters, to survey the Air Corps as an agency of national defense and to make recommendations for its improvement. Reporting in July after an exhaustive study, the board recommended that the office of the Assistant Secretary of War for Air not be reestablished and that the Air Corps remain an integral part of the War Department. It believed, however, that the twofold function of an air corps—(1) fighting, and (2) training and supply—should be performed by different organizations. It recommended that the Office, Chief of the Air Corps (OCAC) should continue to perform the service functions and a General Headquarters (GHO) Air Force should be created as the combat element.1

Five months elapsed before definite steps were taken toward carrying out the recommendations of the Baker Board. Then on 31 December 1934 The Adjutant General issued a letter,<sup>2</sup> effective 1 March 1935, establishing the organization which was to develop the now accepted concept of the mobile striking force of air warfare. Headquarters of the GHQ Air Force was to be at Langley Field, Va., and headquarters of the three wings were to be at Langley Field, March Field, Calif., and Barksdale Field, La. The War Department by this action created a new "air army," coordinate with the four ground armies, and organized and commanded so that it could be used effectively either to help the ground services or to strike at distant

<sup>\*</sup>Members were Newton D. Baker, Karl T. Compton, Clarence D. Chamberlain, James H. Doolittle, Edgar S. Gorrell, George W. Lewis, Maj. Gen. Hugh A. Drum, Maj. Gen. Benjamin D. Foulois, Maj. Gen. George S. Simonds, Brig. Gen. Charles E. Kilbourne, and Brig. Gen. John W. Gulick. Of the military personnel only Foulois was an Air Corps officer.

bases in order to protect the country from an air or ground invasion.

The Commanding General, GHQ Air Force was directly responsible to the Chief of Staff in peacetime and to the theater commander in time of war. His authority enabled him to deal with problems of organization; of training and maneuvers; and of inspection, maintenance, and operation of technical equipment. Previously, air tactical units had been responsible to the commanding generals of the Army corps areas, the Air Corps having served as a specialized supply arm. In the new structure, however, the authority of the Commanding General, GHQ Air Force over the tactical units was made complete, except that corps area commanders retained administrative control over bases where tactical units were stationed.

Because the nine corps areas into which the United States was divided by the Army for administrative purposes had fixed geographical boundaries, they were obviously unsuited for the supervision of tactical units as mobile as those of the GHQ Air Force. Corps area administrative control over stations and bases at which these tactical units were located created a confused situation. Although the Commanding General, GHQ Air Force was responsible for the discipline of his command, he lacked the very important courtmartial jurisdiction that would assure him absolute, undisputed control of his personnel, for court-martial authority remained with the corps area commanders. Here was a basis for serious conflicts

The division of authority between the supply and combat elements of the air arm also presented difficulties. The Chief of the Air Corps and the Commanding General, GHQ Air Force were on the same echelon of command with neither exercising authority over the other.\* The lack of clearly defined spheres of jurisdiction resulted in discord, but fortunately this conflict was palliated by the fact that the men of the GHQ Air Force and the Air Corps were interested in the advancement of the position of the air arm.

Realizing that many unforeseen problems might develop from the creation of the GHQ Air Force, the War Department provided, therefore, that separate reports be delivered by the commanding generals of the two elements at the end

of one year. Although several minor difficulties arose during the first test year of the GHQ Air Force, the preponderance of discussion and criticism centered around the two basic problems already set forth: the relation of Air Corps stations to corps area commanders, and the relation of the Commanding General, GHQ Air Force to the Chief of the Air Corps.

The first of these problems focused upon the control of the stations at which the air units were located and had a direct bearing on the degree of autonomy which could be exercised by the air combat arm. Before the GHQ Air Force was eight months old, Lt. Col. Ralph Royce, commanding officer at Selfridge Field, Mich., wrote feelingly of the rather anomalous position of the air units at his field. He pointed out that he was responsible to four commanders: the Chief of the Air Corps for personnel and technical inspection; the Chief of the Materiel Division for maintenance matters; the Commanding General, GHQ Air Force for technical training and technical development of group and service squadrons; and the corps area commander on matters relating to court-martial and non-Air Corps troops at the station. "It is difficult," he wrote, "even with the excellent cooperation that is being given by all these four commanders for a station commander to carry out his work without, in some instances, unintentionally displeasing one of the four."3 Colonel Royce urged that a reorganization be carried out to bring the air arm under a unified command. He did not seem to care whether it was unified under the Commanding General, GHQ Air Force or the Chief of the Air Corps. Unity was the important consideration.

In September 1935 the Browning Board\* had been appointed to survey the personnel situation in the Air Corps.<sup>4</sup> This board digressed from its personnel investigation to deal with corps area problems. It reported "no evidence whatever of intentional interference with Air Force operations on the part of any Corps Area Commander," but did note some misunderstandings of a minor nature. It could not, however, see any reason for the established means of control, for "there appears to be no help that can be given the Air Force by corps area commanders other than that now rendered by them to stations on an exempted sta-

<sup>\*</sup>See Chart 1, p. 6.

<sup>\*</sup>This board was composed of Col. William S. Browning, IGD, Lt. Col. Follett Bradley, AC, and Maj. Rosenham Beam, AC (Recorder).

tus." The existing organization imposed a "dual responsibility" on station commanders and divided control over them. The best solution, the board thought, was to place "all Air Force stations and all personnel and units thereat solely under the Air Force chain of command."

During consideration of the Browning Board proposal, Maj. Gen. Frank M. Andrews, Commanding General, GHQ Air Force strongly supported the complete exemption of Air Corps stations from corps area control.6 The Assistant Chief of Staff, G-3, Maj. Gen. John H. Hughes, on the other hand, opposed an exempted status for these stations, and suggested that the GHQ Air Force be placed under the field force army commanders. Also, he thought the confusion existing between the corps area commanders and the GHQ Air Force officials was more apparent than real.<sup>7</sup> The Deputy Chief of Staff, however, supported the recommendations of the Browning Board and General Andrews.8 On 8 May 1936 Air Corps stations were exempted from corps area control, but court-martial jurisdiction still remained with the corps area commander.9 In November 1940 corps area control of stations was restored,10 but was again removed in June 1941. This problem was, of course, inextricably interwoven with the issue of air force autonomy, the War Department's attitude on that issue being partially reflected in the exempted station controversy.

The problems created by the division of responsibilities between the Commanding General, GHQ Air Force and the Chief of the Air Corps remained unsolved for several years. This division weakened the position of the air arm because the commanders of the two coordinate elements reported individually to higher War Department authority. Before the end of the first test year of the GHQ Air Force, airmen were pointing out this undesirable situation and suggesting remedies. General Andrews described the existing organization of the air arm as presenting a

unique situation in which one agency [OCAC] has control of the funds, selects the equipment and personnel, and prescribes the tactics and method of employment of combat units, but has no responsibility for the combat efficiency of those units; while other agencies [GHQ Air Force units] are responsible for results but have no authorized voice in securing for themselves the means whereby they may accomplish their results.<sup>11</sup>

He did not believe that the Chief of the Air Corps

should coordinate all Air Corps activities, nor did he think that the General Staff was properly organized to make the best decision concerning air matters. He felt that the difficulties could be overcome by the establishment, in the War Department General Staff, of an air division responsible for military aviation.<sup>12</sup> On the other hand, Maj. Gen. Oscar Westover, Chief of the Air Corps, felt that the solution lay in placing the GHQ Air Force under the Chief of the Air Corps, who would have full responsibility to the Chief of Staff.<sup>13</sup>

A position similar to Westover's regarding unity was taken by the Browning Board. That body, in discussing organization, was of the following opinion:

This organization has damaged Air Corps morale and has split the Air Corps into two factions. . . . time may allay the present apparent mutual distrust . . . but ... the Board believes that the present organization is unsound, lacks simplicity and increases the amount of overhead necessary for . . . administration and operation. . . . The Board believes that the new organization should center around the Chief of the Air Corps. . . . There is at present duplication, overlapping, and confusion. A clear determination of duties and responsibilities is first necessary. . . . The Board believes the creation and continued maintenance of the GHQAF to be sound and wise, and that thorough and continuous training for combat operations is vital to it. . . . further . . . that a consolidation of the Air Corps under one head will permit the Commanding General, GHQ Air Force to devote his maximum effort to training and a minimum to administration.14

In April 1936 a board of Air Corps officers, convened to study the recommendations of the Browning Board, agreed that the GHQ Air Force should be preserved as a separate operating command but thought that it should be under the Chief of the Air Corps for administrative purposes. The Commanding General, GHQ Air Force would thus report directly to the Chief of the Air Corps and not to any lower echelon of his office. This report was not used, however, as a basis of reorganization because a controversy developed over signing it. Col. Hugh J. Knerr signed the report but later withdrew his signature, arguing that as a representative of General Andrews, who did not agree entirely with the proposals of the board, he had no right to sign. Most of the other members of the board felt, on the other hand, that Colonel Knerr's authority to sign was not affected by the attitude of General Andrews.15

While the above controversy was in progress,

on 25 April, General Westover recommended that the GHQ Air Force be subordinated to the OCAC. This recommendation was justified by the argument that the Chief of the Air Corps, as head of an arm of the War Department, had responsibility for that arm. Also, the War Department wanted all air matters to be settled within the arm. Finally, since the GHQ Air Force constituted only 40 percent of the Air Corps, it was logical that it should be subordinated to the larger element.16 Four days after Westover's recommendation, Maj. Gen. George S. Simonds, Deputy Chief of Staff, recommended that the Chief of the Air Corps be given some functions of a deputy chief of staff. He would thus have more authority than the Commanding General, GHQ Air Force but would not have jurisdiction over that officer.17 Even this suggestion was not acceptable to the War Department.

General Andrews felt that the War Department was not making an honest effort to solve Air Corps problems. In July he attacked a study made under the direction of the Assistant Chief of Staff, G-3, for its failure to solve the real problems of the GHQ Air Force:

Apparently a fear has been entertained by the G-3 section that the Air Corps, including the GHQ Air Force, might grow to overshadow other elements of the War Department, and as a consequence concrete results have been inadequate. It is the considered opinion of this headquarters that the greatest ultimate advantage would accrue to the Army if for the time being the War Department did make its major effort in National Defense in the maximum development of air power.<sup>18</sup>

At the end of the second test year of the GHQ Air Force General Westover pointed out that inasmuch as he was charged, among other duties, with responsibility for furnishing personnel, materiel, and equipment, he should also be designated, in time of peace, as "Chief of Aviation, General Headquarters." In that capacity he should be placed in the chain of command intermediate between the Chief of Staff and the Commanding General, GHQ Air Force.<sup>19</sup>

General Andrews, however, expressed opposing views in his annual report to the War Department. He re-emphasized the fact that there was no unity of command in the Air Corps as a whole. He pointed out that although theoretically the General Staff coordinated the activities of the combat and supply and training arms, practically this coordination was done by the Chief of the Air Corps. He reiterated that the OCAC was a service organiza-

tion and as such should not be superior to a combat unit. However, although the OCAC had no legal authority over the GHQ Air Force, it could by acting as a superior air general staff "exert a high degree of control over the instrument it is intended to serve." Andrews made no specific recommendations, but he thought that the creation of an agency to coordinate the two elements of the Air Corps should not be viewed as preferential treatment for the air arm. If the GHQ Air Force were to remain "skeletonized," he saw no need for much of the administrative overhead. On the other hand, he maintained that the existing organization could not mold an effective striking force.<sup>20</sup>

Later in the year Andrews expressed the conviction that the "continual difficulties" over personnel, equipment, and funds emphasized the weakness of the Air Corps organization. He felt that there were three possible means of resolving the problems created by the coordinate positions of the Chief of the Air Corps and the Commanding General, GHQ Air Force: 1) the creation of a Chief of Aviation who would control both service and tactical units, 2) the appointment of a deputy chief of staff for aviation, and 3) the subordination of the GHQ Air Force to the Chief of the Air Corps. Although he considered the last solution the least desirable, it would have the merit of charging the Chief of the Air Corps with "direct responsibility for actions and recommendations which he makes, which affect the GHQ Air Force and other tactical units."21 Again, no remedial steps were taken.

Apparently dormant during 1938, the issue of integration was revived early the next year. In February 1939 Maj. Gen. Henry H. Arnold, who had succeeded Westover as Chief of the Air Corps, recommended that he be designated "Chief of Aviation, GHQ." He listed three distinct advantages which would accrue from the acceptance of this proposal: 1) the air arm could organize in such a manner that an "operating staff would be immediately available in event of hostilities" without disrupting the functioning of the office; 2) the existing command arrangement and internal organization of the GHQ Air Force would not be affected; and 3) the transaction of business between the Chief of Staff and the Chief of the Air Corps would be expedited.<sup>22</sup>

These arguments proved to be effective. After four years of discussion, the Air Corps had finally

persuaded the War Department that the division of responsibility between the two elements of the arm was undesirable. On 1 March 1939 the Office, Chief of the Air Corps and the GHQ Air Force were placed under the Chief of the Air Corps.<sup>23</sup> Although the command duties of the Commanding General, GHQ Air Force were not affected, he was made immediately responsible to the Chief of the Air Corps and not to the Chief of Staff.<sup>24</sup>

The relationship established in 1939 was destined to be short-lived.\* The expansion program had begun in that year, and the shortage of planes and trained personnel made it essential to have the best possible coordination of effort. To that end, the necessity of keeping the GHQ Air Force under the Chief of the Air Corps was stressed.<sup>25</sup> But the advice of General Arnold went unheeded, and on 19 November 1940 the GHQ Air Force was removed from his jurisdiction.<sup>26</sup> The effects of this separation were moderated by the fact that the appointment of Arnold as Acting Deputy Chief of Staff for Air on 11 November 1940 put him in a position to coordinate the efforts of the two elements of the Air Corps.

The relationship of the air arm to the War Department was also changed by the action on 19 November. The GHQ Air Force as an element of the field forces was placed under the control of the general commanding the field forces, the Chief of Staff. Station complements were made subject to the jurisdiction of the corps area commanders. Much of the independence of action which the air arm had been accorded in 1935 was thus removed, and the concept of the employment of airpower as a separate force received a setback.<sup>27</sup>

The November reorganization also provided for the creation of four air districts, an action which was deemed essential because the GHQ Air Force had expanded considerably and it was now necessary to decentralize tactical control and training. It was expected that the districts would be organized as potential theaters of operations. A few month later, on 17 March 1941, these districts were replaced by the four continental air forces (First to Fourth Air Forces) in the four defense commands—territorial agencies with "appropriate staff designed to coordinate or prepare and to initiate the execution of all plans for the employment of Army Forces and installations against

enemy action in that portion of the United States lying within the command boundaries."<sup>28</sup> The Commanding General, GHQ Air Force was placed under the control of General Headquarters, an agency established the previous July to decentralize activities of the War Department and to assist the Chief of Staff in his capacity as commanding general of the field armies.<sup>20</sup>

The channels of control of the Air Corps established in November 1940 were viewed with disfavor by those responsible for military aviation. On 26 December the Acting Chief of the Air Corps, Maj. Gen. George H. Brett, stated that the existing means of control "would be disastrous in the event of war." He maintained that the "best brains" of the air arm were forced to submit matters to a superior staff which lacked knowledge of air matters. Responsibility and authority were not commensurate, and it was impossible to perform the enormous task ahead as long as the division between the OCAC and the GHQ Air Force existed. As a possible solution to some of the difficulties, he proposed that the Under Secretary of War be given more specific controls over procurement and that three assistant secretaries of war be appointed. These new assistants should be representatives of the ground forces, the air arm, and the services common to the two. 30 On the very day that General Brett made the above suggestions, Robert A. Lovett was appointed Special Assistant to the Secretary of War. He was to function primarily as an assistant to the Under Secretary of War in matters of Air Corps procurement. In April 1941 Lovett was designated as Assistant Secretary of War for Air.\*

The unsatisfactory relationship between the GHQ Air Force and the OCAC existed until the summer of 1941. However, it was apparent that the division of authority and responsibility was not conducive to the best interests of the expansion program, and in March of that year Secretary of War Henry L. Stimson had directed that

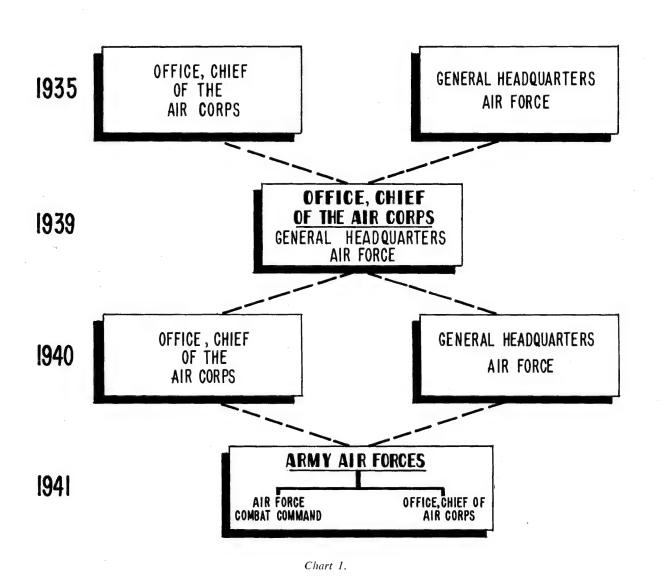
steps be taken to place our air arm under one responsible head, and that plans be worked out to develop an organization staffed and equipped to provide the ground forces with essential aircraft units for joint operations, while at the same time expanding and decentralizing our staff work to permit Air Force autonomy in the degree needed.<sup>31</sup>

In regard to the amount of freedom to be allowed the air arm, Secretary Stimson stated that he

<sup>\*</sup>See Chart 1, p. 6.

<sup>\*</sup>This office was in existence earlier. See above, p. 1.

# RELATIONSHIP BETWEEN OFFICE, CHIEF OF AIR CORPS AND GENERAL HEADQUARTERS AIR FORCE 1935 — 1941



thought "autonomy of the air arm rather than segregated independence" was the best method of "obtaining successful results." 32

In accordance with Stimson's instructions, steps were taken to bring about the desired results. At length, an agreement was reached, and the terms of the reorganization were set forth in AR 95-5 of 20 June 1941. This regulation created the Army Air Forces to coordinate the activities of the Office, Chief of the Air Corps, the Air Force Combat Command (formerly the GHO Air Force), and other air units. Direct responsibility for aviation matters was given to the Chief of the Army Air Forces who was to be assisted in policy formulation by the Air Staff.\*33 The creation of this staff was in line with the Secretary's policy of decentralizing staff work and giving the Army Air Forces a greater degree of autonomy. The Army Air Forces was intended to have, "so far as possible within the War Department, a complete autonomy similar in character to that exercised by the Marine Corps of the Navy." However, it did not free the Army Air Forces or the Air Staff from subordination to the General Staff.34

The Chief of the Army Air Forces was made directly accountable to the Secretary of War and was charged with the establishment of plans and policies for all aviation activities. Under his jurisdiction the Chief of the Air Corps and the Commanding General, Air Force Combat Command were given immediate responsibility for service and combat matters, respectively.†

The reorganization of June 1941 did not solve the basic problem of unity of effort and delineation of responsibilities between the service and combat elements of the air arm. The legal status of the OCAC was uncertain. The Commanding General, Air Force Combat Command and the Chief of the Air Corps remained on the same echelon. More out of line with military procedure, a lieutenant general, the Commanding General of the Air Force Combat Command, had to be responsible to and function through a major general, the Chief of the Army Air Forces<sup>††</sup> Because the Chief of the Air Corps and the Chief of the Army Air Forces were charged with the execution of many identical

functions, it was inevitable that conflicts would arise.

Nor was the relationship between the air arm and the War Department clearly delimited and defined. The Air Staff, the War Department General Staff, and the "staff" of the OCAC were all involved in service and supply problems. For tactical and combat matters the staff of the Air Force Combat Command, the Air Staff, General Headquarters, and the War Department General Staff had divided responsibility. This parceling of responsibilities and variations in channels of authority tended to increase friction among the several agencies. The reorganization did not give to the Army Air Forces the degree of autonomy thought to be necessary for satisfactory operation. It was generally felt within the AAF that the air arm was so circumscribed by the General Staff that it could do virtually nothing on its own. Furthermore, the conflict between the General Staff and GHQ, which considered itself responsible for strategic plans and viewed the General Staff as an administrative agency, made the position of the air arm weaker than it otherwise would have been. Nevertheless this reorganization was the first significant advance in the movement for autonomy of the air arm since the creation of the GHQ Air Force in 1935.35

Because existence of GHQ seemed to complicate the exercise of the over-all authority of the War Department, key officers of War Plans Division (WPB) sided privately with the air arm view that GHQ should be eliminated. In a study reviewed by AAF planners, Lt. Col. William K. Harrison of WPB proposed separate Zone of Interior commands for air, ground, and service forces, plus a command section inside the War Department. On 24 October Brig. Gen. Carl Spaatz, the Chief of Air Staff, submitted a reorganization plan which incorporated Harrison's ideas.<sup>36</sup> "The routine treatment of this recommendation resulted in 100 percent nonconcurrences.<sup>87</sup>

However, the lack of clear channels of command was producing disturbing failures to follow through on orders given to the defense areas. On 3 November Gen. George C. Marshall, Chief of Staff, admitted that he had "the poorest command post in the Army. . . ." With very definite ideas on what should be done, on 14 November General Arnold provided Marshall with a detailed proposal

<sup>\*</sup>For a discussion of the Air Staff, see below, Chapter III. †The Commanding General, Air Force Combat Command was given control, including court-martial, of all Combat Command stations.

mand stations.

††Lt. Gen. Delos C. Emmons had been appointed Commanding General, GHQ Air Force on 1 March 1939. Maj. Gen. Henry H. Arnold was Chief of the AAF.

which became the basis for final agreement. The Arnold plan converted GHQ into a ground force training command, grouped supply services under a service command, and called for a unified air command. The Chief of Staff through a superior staff would direct the entire Army effort. The Pearl Harbor attack which followed shortly delayed action but served to reinforce the conviction that a basic change was imperative.<sup>38</sup>

Other proposals for reorganization were made by Air Corps agencies. On 18 November the Legislative Analysis Section of A-1 had proposed the creation of an Army Air Forces under the Chief of Staff and Secretary of War. Ground and air forces should have equal status and equal access to service and supply agencies. Units of the Air Force Combat Command should be detached only with the approval of the Commanding General, Army Air Forces. The commanding general of the air forces should have strategic direction of air operations in theaters, control of budgetary and financial matters, and freedom to reconstruct his organization as he saw best.<sup>39</sup>

The most significant reasons offered for the presentation of the above proposal were:

- 1. The organization of June 1941 was of doubtful legality because the Chief of the Air Corps was supposed to be the head of a combatant arm.
- 2. The autonomy of action of the Army Air Forces was not full, and the degree enjoyed was not based on legislative authorization but was entirely dependent on the attitude of the War Department.
- 3. Agitation for an independent air force could best be met by the creation of a truly autonomous air force operating within the principle of unity of command.<sup>40</sup>

Meanwhile, expansion and the threat of war had convinced certain officials in high policy circles of the War Department that reorganization was imperative. A short time before the attack on Pearl Harbor, General Marshall recalled Brig. Gen. J. T. McNarney from England and delegated to him the reorganization of the War Department.\* The work of the committee appointed by General McNarney, however, was delayed by his participation as a member of the Roberts Committee investigating the bombing of Pearl Harbor.

The entry of the United States into the war brought more supervision of the air arm and created additional inconsistencies and confusion. In January 1942 General Arnold pointed out that on 11 December 1941 GHQ had been authorized to deal directly with both the Chief, Army Air Forces and the Commanding General, Air Force Combat Command concerning air reinforcements. Unless clarifying instructions were issued, conflicts in the assignment of units were inevitable. Also, the Chief, Army Air Forces was responsible for the air defense of the United States except when an invasion was threatened, in which case a theater of operations was to be created and the air and ground forces were to be employed together. In other words, his responsibility ceased just at the moment when there was greatest justification for that responsibility. Other inconsistencies and conflicts of authority were noted by General Arnold and he deemed it essential to resolve these and to define clearly the functions and responsibilities of the AAF.41

At the same time, the AAF was conducting its own studies in the interest of efficiency and a more autonomous position. About 1 October 1941, Brig. Gen. Muir S. Fairchild, Executive, OCAC, and Lt. Col. Byron E. Gates, head of Plans Section, OCAC, had requested that the Bureau of the Budget assist in a reorganization study. A formal request from General Arnold had followed and the Bureau began participation in the study in early November.<sup>42</sup>

From the beginning some of the air force officials adopted the attitude that the Bureau of the Budget personnel knew nothing of the organization of a military arm, but the Bureau consultants contended that the main difficulties could be solved only through a knowledge of management problems and not solely through an acquaintance with military techniques.43 The activities of this group were hampered by the illness of General Fairchild and the confusion and restrictions resulting from the attack on Pearl Harbor. On 30 January 1942, however, the consultants wrote a memorandum to General Arnold setting forth the main factors to be considered in the reorganization. These were the narrow span of control by the Chief, Army Air Forces; the changed position of the Air Force Combat Command; the lack of functional definitions among units of the Air Staff, Air Corps, and Combat Command; the need for civilian adminis-

<sup>\*</sup>Actually, General McNarney did not leave England until 7 December 1941.

trators; the desirability for service and supply coordination on a decentralized basis; and the necessity for the regulation of partial reorganizations.

Meanwhile, in reply to a memorandum of 9 January from the Chief of Staff, the Air War Plans Division presented its ideas on reorganization of the War Department. It pointed out that the reorganization set forth in AR 95-5 of 20 June 1941 had not brought a satisfactory answer to the problem of unity of command. Many responsibilities were dealt with concurrently by the Air Staff and the General Staff "with resultant conflict, delay and confusion." There was need for adequate air representation in all policy-making and staff agencies, for consolidation of control of all the armed services under a single head, and for sufficient liberty for each service to develop its potentialities to the fullest degree. It proposed, therefore, that coordinate ground, air, and naval arms be created with unity of command effected by a coordinator of common services. Under this plan a small staff of ground, air, naval, production and supply, and political and economic warfare representatives would report directly to the President. It felt that this organization would give the desired freedom of action and at the same time ensure the necessary unity of command.44

The McNarney Committee began its deliberations upon the chairman's return from Hawaii and early in February laid down the general outlines of the reorganization. The AAF was instructed to create a policy staff, an operating staff, and a command level. General Arnold delegated the responsibility for the detailed plan to Colonel Gates who had been studying the air arm structure intensively for several months. Colonel Gates assembled a committee composed of Col. Otto Nelson,\* Lt. Col. Guido R. Perera, Capt. Joseph S. Clark, Jr., and Leonard Hoelscher and Bruce Smith of the Bureau of the Budget. This committee conducted detailed studies to supplement the information on hand, analyzed the functions of the Washington office, and consulted many key men.45 Much of the discussion centered about the functions of the operating staff which came to be known as the "directorates." Also, every effort

was made to "push to the front all activities of a

staff nature and to delegate to the field all that was not."46

The plan evolved by the AAF committee was submitted in the latter part of February to General Arnold, and in turn to the War Department, where General McNarney and the reorganization committee made some changes. The primary considerations in this reorganization seemed to have been 1) the securing of unity and celerity of control, 2) the decentralizing of detail, 3) an increased recognizing of a new and rapidly developing method of warfare, and 4) the relieving of the air and ground arms from much of the annoyance and effort required for supply, procurement, and general housekeeping.

The final organization was embodied in War Department Circular No. 59, 2 March 1942, which became effective on 9 March. By this reorganization the War Department was consolidated into three coordinate, autonomous forces: the Army Air Forces, the Army Ground Forces, and the Services of Supply (later the Army Service Forces). Each was under a commanding general. The General Staff was reorganized so that approximately 50 percent of its personnel were representatives of the air arm. The Army Air Forces had, at last, achieved theoretical autonomy within the framework of the War Department.

Between the bombing of Pearl Harbor and 9 March the Air Force Combat Command had virtually ceased to exist as a combat agency. The First and Fourth Air Forces had been placed under the Eastern and Western Defense Commands, respectively. The Second and Third Air Forces had been confined primarily to training. In the combat zones the air units were under the control of the theater commanders. The abolishment of the Air Force Combat Command by the reorganization was both in recognition of a fait accompli and in conformance with the newly stated mission of the air arm.47 This mission was "to procure and maintain equipment peculiar to the Army Air Forces, and to provide air force units properly organized, trained, and equipped for combat operations." Thus, at this stage the Army Air Forces became a supply and training agency, theoretically not concerned with actual combat operations or strategic planning.

During the early days of the war General Arnold -as Chief, AAF and Acting Deputy Chief of Staff for Air-undoubtedly had played an important

<sup>\*</sup>In the course of the study Colonel Nelson became a member of the McNarney committee and was replaced by Capt. J. W. Aston.

personal role in the mapping of aerial strategy. Many of his key subordinates also were engaged in strategic planning.48 The 9 March restatement of the mission of the AAF was intended to withdraw that organization from strategic decisions. The staffing of the War Department General Staff with approximately 50 percent air officers was intended as insurance that vital air problems would receive proper attention and that decisions would be rendered at the proper echelon.\* However, the creation, shortly after our entry into the war, of the Joint Chiefs of Staff (JCS) and the Combined Chiefs of Staff (CCS) gave to the Commanding General, AAF a much more prominent role in the formulation of strategic plans. On those staffs, he was the equal of the heads of the military and naval forces, though nowhere in his stated mission was he more than the commanding general of a supply and training agency.

That the AAF should have been withdrawn from strategic planning was perhaps unrealistic. Practically all the military leadership available for air combat operations was in the AAF, and strategic planning must be based to a considerable degree on operational planning. It was unlikely that the air officers on the General Staff could at once take over full responsibility for all the detailed strategic decisions involved in allocating units and supplies to the theaters. Thus, frequently—and increasingly—the detailed planning was left to the Air Staff.<sup>49</sup>

During the period of hostilities no steps were taken to clarify the March 1942 statement of the mission of the AAF as a whole. Nevertheless, one restatement of the employment of airpower was of

significance. In the summer of 1943 the War Department stated: "Land power and air power are coequal and interdependent forces: neither is an auxiliary of the other."50 Command of air elements in a theater of operations, the War Department directed, was to be exercised through the air force commander, and air units were not to be attached to ground units "except when such ground force units are operating independently or are isolated by distance or lack of communication." Moreover, the Commanding General, AAF was to exercise such technical command over units in theaters of operations as was "necessary for the control and supervision of training and the supply and maintenance of equipment peculiar to the Army Air Forces." Actually, this policy was a statement of the arrangement that had existed in the North African-Mediterranean theater for several months.

Before V-J Day several steps had been taken toward determining the postwar position of the Army Air Forces.<sup>51</sup> In the spring of 1944, AAF chiefs and other officials of the War Department, appearing before the House Select Committee on Post-War Military Policy, testified to the desirability of making the Army Air Forces coordinate with the Army and Navy in a single department of the armed services. The Navy was noncommittal. But this committee had investigative powers only. Following further study of the problem, however, a special committee of the JCS in April 1945 recommended that a single department of three coequal branches be created within six months after the end of the war. No action was taken until the whole issue of postwar organization was opened before the Senate military affairs committee in the fall of 1945. On this occasion the attitude of the War Department was the same as in the spring of 1944; the Navy had ceased to be noncommittal and had gone over to determined opposition.

<sup>\*</sup>It was explained at the time of the reorganization that "normal communication by the Air Forces with the theater would be through the General Staff." (James Sunquist, "Wartime Organization of the Army Air Forces," 3 Aug 42, p. 26, in USAF HD 168.1-4.)

### Internal Organization at Headquarters, 1935-1942

ALTHOUGH occasionally the War Department intervened to indicate that it thought there were too many major divisions of the air arm, the Air Corps was left relatively free to determine its own internal structure. This interposition of authority occurred most frequently from 1925 to 1935. From 1935 to 1939 there was a comparatively stable number of main organization units; in the latter year, and after, there was a decided increase, resulting mostly from the expansion program.\* In March 1942 came a sweeping reassignment of duties, as well as the epochal change in the relationship of the air arm to the War Department.<sup>1</sup>

Many of the internal changes were necessitated by the growth and re-emphasis of administrative responsibilities resulting from increased autonomy, technical advances, and the changing concepts of strategy and tactics. After the coming of war those responsible for Air Corps organization sought to keep the administrative structure abreast of military and scientific developments. Their approach was pragmatic because of the urgency of the demands for services. They attempted to keep the air force organization as flexible as the weapon it was designed to serve and adjusted its structure as experience indicated the best methods of meeting the needs of the operating components of the air arm

In 1935 the Office, Chief of the Air Corps was the service element of the air arm.† It consisted of six major divisions: Personnel, Information, War Plans-Training, Supply, Finance, and Reserve.† The immediate subordinate of the Chief was an Assistant Chief of the Air Corps, who had

supervision over the Air Corps Board, the Air Corps Technical Committee, and special boards that were appointed from time to time. In 1938 he was also charged with directing the activities of the Aeronautical Board and the work of the Plans and Inspection Sections. The next year the Chief of the Materiel Division, who had also been designated an Assistant Chief of the Air Corps, was brought from Wright Field to Washington.\* The Chief of the Air Corps now began to rely on "special assistants" who rendered "advisory and counselor service on technical, fiscal, and administrative matters." With this development many of the activities formerly performed by the Assistant Chief were transferred to the Executive.

The functions of the Executive in 1935 were quite different from those of an executive by the end of 1943.2 In 1935 he was primarily a managerial assistant charged with general housekeeping functions and civilian personnel matters.† In 1937 the Executive office, after receiving the Reproduction, Plans, and Inspection Sections, was classed as a division.†† Over the Plans and Inspection Sections, however, it exercised no executive authority, and the next year they were removed from its jurisdiction.\*\* In 1940 the Executive began to exercise more truly executive functions and became the immediate executor for the Chief of the Air Corps. Office management and civilian employee relationships, formerly the responsibility of the Executive, as well as other service activities,

<sup>\*</sup>This was done so that the officer charged with responsibility for materiel development would be the immediate adviser of the Chief of the Air Corps on materiel matters.

<sup>†</sup>Because the number of civilian employees in the Air Corps was very small, it was not considered essential to have a separate division or even section to handle civilian personnel relationships

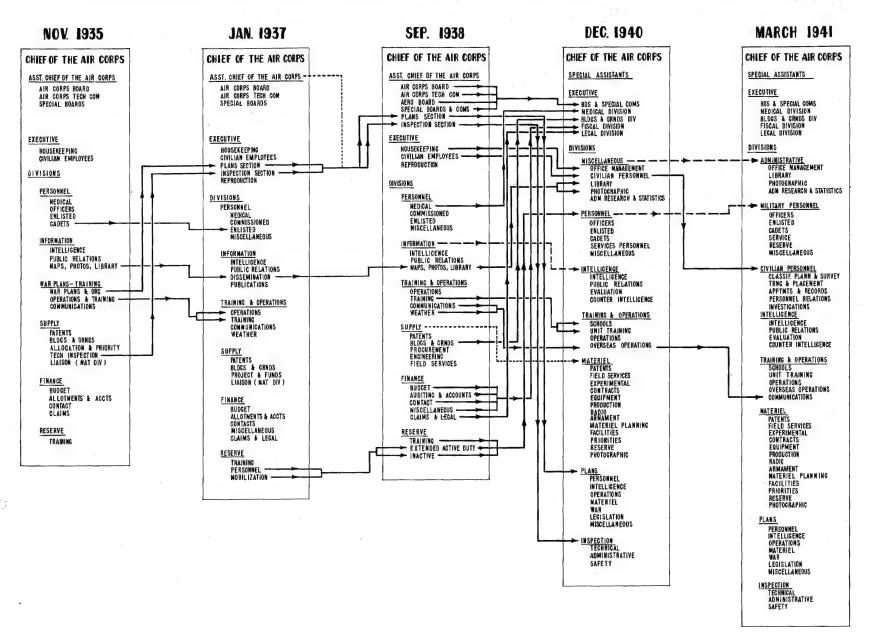
<sup>††</sup>See Chart 4, p. 15.

<sup>†††</sup>See Chart 5, p. 16.

<sup>\*</sup>See Chart 2.

<sup>†</sup>The GHQ Air Force was the combat or tactical element.

#### ORGANIZATION OF THE OFFICE, CHIEF OF THE AIR CORPS, 1935-1941



# THE OFFICE, CHIEF OF THE AIR CORPS

NOVEMBER 1935

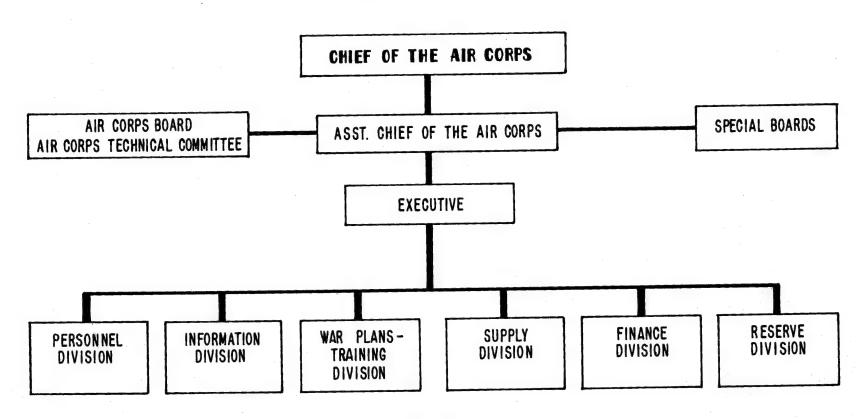


Chart 3.

became the province of the Miscellaneous Division (renamed the Administrative Division in 1941). No further changes were made in the Executive's functions until the delegation of some of his responsibilities to two assistant executives in December 1941. In March 1942, when the OCAC was abolished, the functions of the Executive were widely distributed among officials of the policy and operating staffs.

The Personnel Division in 1935 dealt only with military personnel matters; civilian personnel relationships were handled by the chief clerk in the Executive office. Its structure was virtually unchanged between 1935 and 1939. With the coming of the expansion program, additional sections were added to help carry the increased work, and the Medical Section was removed to the office of the Executive.\* Part of the increased load was caused by the assumption of the personnel functions of the Reserve Division which was abolished in 1940. In 1941† the Personnel Division was appropriately renamed the Military Personnel Division. In March 1941 the Civilian Personnel Section of the Administrative Division was given separate division status. This action was prompted by the necessity of giving more attention to the civilian employment problems created by the growth of the air arm. In the latter part of 1941 the Civilian and Military Personnel Divisions were placed under an Assistant for Personnel and Training Services. In 1942 the Civilian and Military Personnel divisions were combined, but it was not until the establishment of the War Department Manpower Board and the Manpower Division of Management Control in 1943 that the importance of civilian personnel and its relationship to over-all personnel employmen and requirements was fully recognized.

There were few significant intelligence activities conducted by the Air Corps prior to World War II. In 1940 the Information Division, which before 1939 had been a service office, was redesignated the Intelligence Division<sup>††</sup> to indicate the growing status of air intelligence. The major components of the Intelligence Division were the newly added Evaluation and Counter Intelligence Sections and the old standbys, Intelligence and Public Relations Sections. It was not, however, until after the creation of the Air Staff in June 1941 and

\*See Chart 6, p. 17. †For a short period in 1939 the Personnel Division was a part of the Training Group.

††See Chart 7, p. 18.

the subsequent assumption by A-2 of some of the responsibilities previously borne by G-2 that the activities of this organization assumed sizable proportions.

Responsibility for war plans and for training activities was lodged with the War Plans-Training Division in 1935. With the removal of the planning function to the Executive office in 1936, the remaining activities were performed by the Training and Operations Division, which was composed of Training, Operations, and Communications Sections. A Weather Section was added in November 1937. For a brief period in 1939 the Personnel and Training Divisions were combined in the Training Group, and in 1940 the training functions of the discontinued Reserve Division were made the responsibility of the Training and Operations Division. This arrangement existed with some minor additions and shifts until the creation of the Air Staff in June 1941.

The organization of the agency concerned with materiel matters caused more controversy than that of any other portion of the Air Corps. Inasmuch as the Materiel Division and its chief were located at Wright Field in 1935, the Supply Division in Washington advised the Chief of the Air Corps on materiel matters. The latter division included five small sections, the most important of which were Buildings and Grounds, Technical Inspection, and Materiel Division Liaison. The following year the inspection function was placed in the Executive office, but no other significant changes occurred until 1938 when some new functions were added and the liaison section abolished. The expansion program accentuated the differences between the Supply Division in Washington and the Materiel Division at Wright Field. This resulted in the abolition of the Supply Division and the removal of the Chief of the Materiel Division to Washington in 1939. The Materiel Division then underwent a great expansion with the creation of a number of planning sections corresponding to the operating activities at Wright Field. The Chief of the Materiel Division was thus in a much more favorable position to act as adviser to the Chief of the Air Corps.

The execution of the functions relating to personnel, training, and materiel was readily adapted to the existence of separate divisions, but there were other functions—such as planning, inspection, fiscal, legal, construction, and medical—that

# THE OFFICE, CHIEF OF THE AIR CORPS

JANUARY 1937

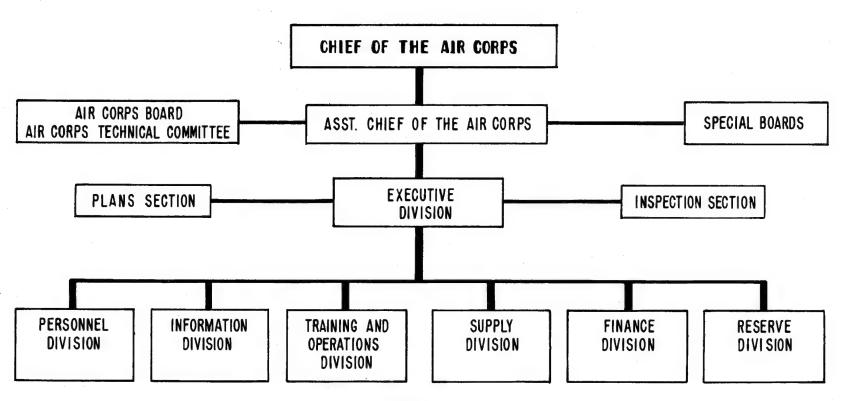


Chart 4

# THE OFFICE, CHIEF OF THE AIR CORPS

SEPTEMBER 1938

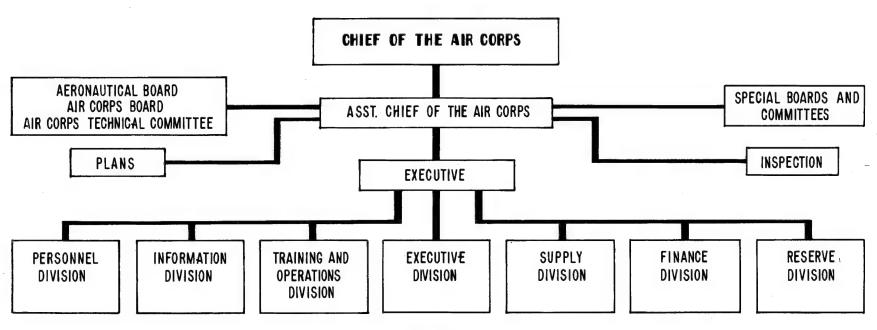
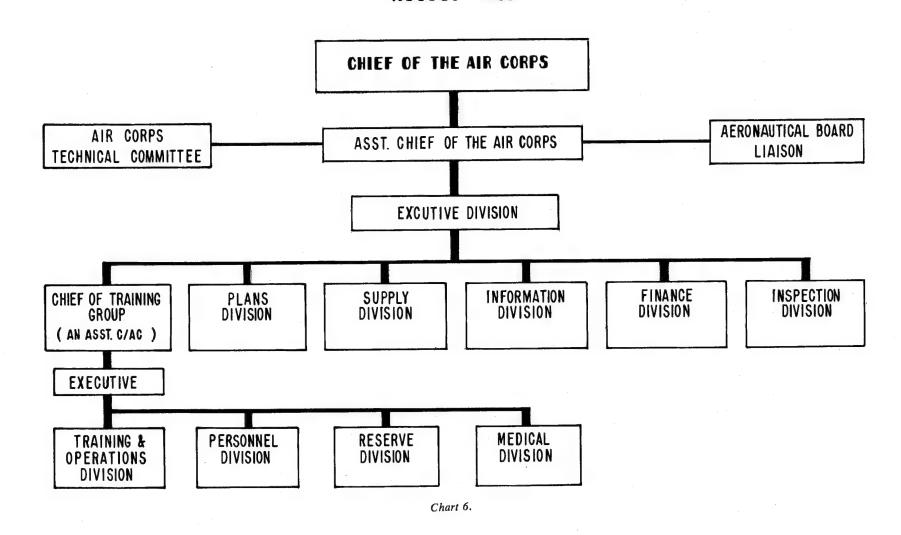
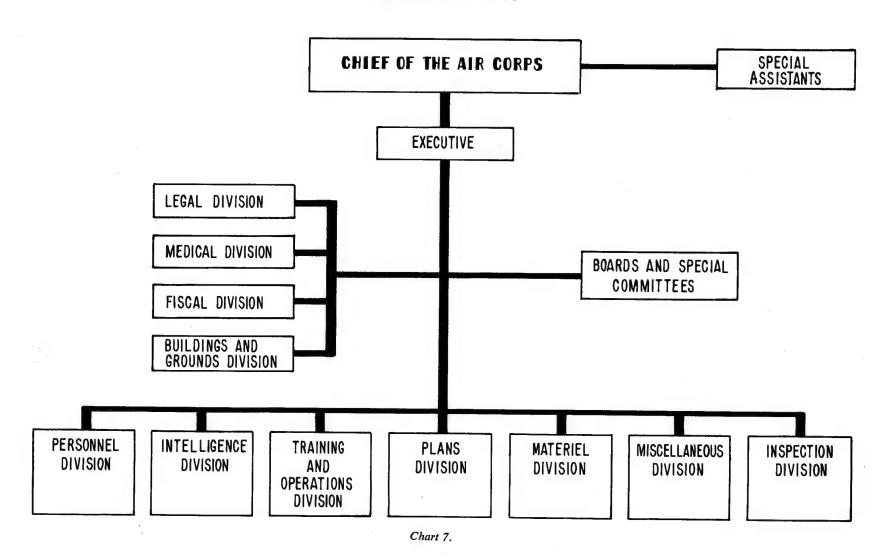


Chart 5.

# THE OFFICE, CHIEF OF THE AIR CORPS AUGUST 1939



# THE OFFICE, CHIEF OF THE AIR CORPS DECEMBER 1940



were no more specifically applicable to one division than to another, and which applied to all in approximately equal degree. The method of dealing with the organization and position of agencies charged with these functions is of especial interest and significance. Generally, the handling of such activities seems to have been based on the sound principle that any activity which concerned all divisions should have independence of action. Planning was, perhaps, the most important of these.

The shift of the planning function to the Executive office in 1936\* resulted in greater freedom of action and a position of higher importance, both of which were retained in a change in echelon in 1938 when Plans was placed immediately under the Assistant Chief of the Air Corps. In 1939, however, Plans was organized into sections corresponding roughly to those of the War Department General Staff and placed on the division level. With the reorganization of 20 June 1941 the sections of Plans Division became the main components of the Air Staff. A portion of the parent division, however, remained in the OCAC; this residual Plans Section was important in the subsequent development of Management Control.

From 1935 to 1940 inspection activities were confined almost exclusively to the technical phases. Although this function concerned all divisions nearly equally, the inspection agency was located in the Supply Division in 1935. From that date to 1941 the shifts in the inspection agency were identical with those of Plans, and in June 1941 the policy aspects of inspection were separated from the operating phases and placed in the Air Staff.

Although Plans and Inspections were made regular divisions in 1939, four agencies were removed in 1940 from that level and placed in the office of the Executive. These were the Legal. Fiscal, Medical, and Buildings and Grounds Divisions. The Legal and Fiscal Divisions had been in the old Finance Division. The Medical Division had been a section of Personnel, a division in the Training Group, and later, a separate division. Buildings and Grounds had been a part of the Supply Division.†† The general upward shift indicated some trend toward a staff but was more analogous to what later became known as the Special Staff.

Thus, at the time of the establishment of the Army Air Forces in June 1941 there were eight divisions and four special staff divisions in the Office, Chief of the Air Corps. One month before, a study by the Administrative Research and Statistics Section had indicated the necessity of reorganization and realignment of responsibilities and functions. It was noted that there was a "large amount of duplication of activities" which sometimes made it difficult to establish responsibility for certain duties. This situation not only caused confusion but was "highly wasteful of time and energy."3

Under the provisions of the 20 June 1941 reorganization the Chief, Army Air Forces coordinated the work of the combat and service elements of the air arm. In complying with the principles of separating policy and operating activities, the policy functions of the Intelligence, Inspection, and Medical Divisions were placed in the Air Staff. Some operating activities also were removed to the Staff when separate Communications and Public Relations offices were established, a statistics section was created, and the remaining medical activities were transferred.

With the coordination of activities by the Chief, Army Air Forces and the transfer of many functions to the Air Staff, the divisions of the OCAC should have decreased. The reverse was true, however, and by early December 1941 there were 14 divisions. Two of the new divisions—the Ferrying and Air Service Commands-were established for the quick dispatch of aircraft to lendlease beneficiaries, and for the service and maintenance of aircraft. The third additional office resulted from a splitting of the Training and Operations Division into two units.

The structure of the air arm was in a very unsettled state in the latter part of 1941, and the entry of the United States into the war revealed inadequacies and accelerated changes. On 24 December Maj. Gen. Walter R. Weaver, Acting Chief of the Air Corps, effected a reorganization which reduced the main divisions to seven by combining some of the associated activities under "assistants." The Materiel Division, the Ferrying

<sup>\*</sup>See above, p. 14.

<sup>†</sup>See below, p. 25. ††On 1 April 1939 the Chief of the Supply Division had recommended that the Patents and Buildings and Grounds Sections be removed from the jurisdiction of the Supply Division and become separate organizations. He noted that it had been "impossible to exercise any direct and intelligent supervision" over those sections. Plans concurred on 7 April. (R&R, Supply Div to Exec [thru Finance], 1 Apr 39, in AAG 321.9, Orgn

Command, and what remained in the OCAC of the Intelligence and Inspection Divisions became four of the new offices. The Air Service Command and the Buildings and Grounds Division became a fifth; the Operations Division, minus many miscellaneous functions, became the Army Air Traffic Services; and the Military and Civilian Personnel, Training, and Medical Divisions were combined under the Assistant for Personnel and Training Services. Functions which had been performed by the Legal, Fiscal, and Administrative Divisions were transferred to the Adjutant General, the Judge Advocate, the Fiscal Officer and two assistant executives for planning and coordination.\* Within a month more changes were effected when the training function was separated from the medical and personnel functions and the Flying Training Command was created.†

The new terminology introduced by the December organization remained unclarified at the time the OCAC was eliminated in March 1942. Although General Weaver apparently favored the development of the OCAC into a command, this issue was never settled. The reorganization of the entire air arm, however, had been under consideration for several months, even before the changes made in December. The division of responsibility among the Army Air Forces, the Air Force Command, and the OCAC had proved unsatisfactory, and the exigencies of war demanded more centralized control. In the course of the reorganization study the consultant group<sup>††</sup> on 30 January wrote to General Arnold setting forth several major factors for consideration.4

Three of the points which the consultant group suggested for consideration concerned delimitation of responsibilities. The scope of activities under control of the Chief of the Air Corps was too great in view of his subordinate position; many of his responsibilities were also responsibilities of the Chief, Army Air Forces. For the expedient accomplishment of a project it had been necessary, therefore, for the Chief, Army Air Forces and the Air Staff to by-pass the Acting Chief of the Air Corps and to deal directly with subordinate agencies. It was suggested that changes be effected which would make these relationships

definite and regular. Also, functional definitions among units of the Air Staff, Air Corps, and Combat Command should be drawn in order to prevent planning and operating by the various components.

Secondly, the consultant group emphasized that changes brought about by war were such that the position of the Commanding General, Air Force Combat Command did not fit existing circumstances nor would it conform to conditions likely to develop. Many factors seemed to preclude this official's becoming a combat leader. If he were to be concerned primarily with training, he would be an unnecessary link in the chain of tactical command.

The third category of suggestions by the consultant group accented the need for better administration and closer coordination of activities. In this connection the group stressed the need for civilian administrators to maintain a continuity of routine administration by doing the work for which the airmen were not suited or in which they were not interested. In the service and supply field the need for coordination on a decentralized basis might be met by some system similar to the nine Army corps areas. Finally, it was felt that a great amount of the overlapping and duplication caused by frequent partial reorganizations could be eliminated if some control over piecemeal shiftings were established.

The above suggestions contained the essence of many of the principles later adopted—the formation of the policy and operating staffs, the widened authority of the Chief, Army Air Forces, the decentralization of activities and responsibilities, the development of management control, and others. Emphasis on these points varied considerably, however, and the War Department directive of 2 March 1942 established the basis for the reorganization. There was no alternative but to organize headquarters of the Army Air Forces into policy and operating staffs, and the field activities as commands. The OCAC and the Air Force Combat Command were eliminated as unnecessary links, and their functions were distributed among the three new echelons of authority.

Under this threefold division of responsibility, which became effective on 9 March 1942, the policy staff was made responsible for the formulation of over-all plans and policies which were then to be implemented by the operating staff, or direc-

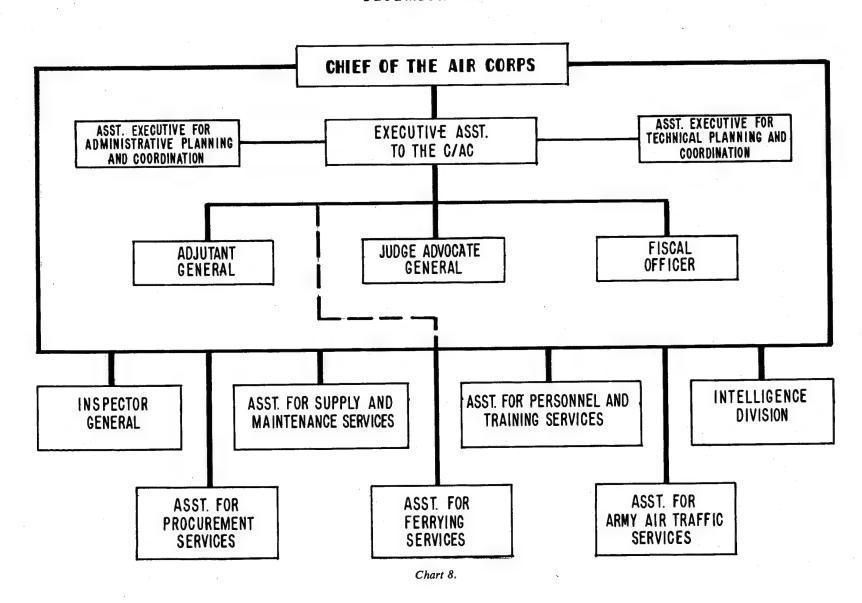
<sup>\*</sup>See Chart 8, p. 21.

<sup>†</sup>The Technical Training Command had been in existence since 26 March 1941.

<sup>††</sup>See above, p. 8.

# THE OFFICE, CHIEF OF THE AIR CORPS

DECEMBER 1941



torates.\* The detailed plans and policies were to be transmitted to the commands for execution.† Within the next year certain factors combined to make possible the simplification of Headquarters, AAF on 29 March 1943. This change, which combined the policy and operating staffs, eliminated one echelon. By this action the Army Air Forces repudiated the principle that policy and operations could be separated successfully at the staff level and attempted to decentralize many of the operating functions to the field.††

<sup>\*</sup>See below, Chapter III.
†See below, Chapter IV, for an account of the command principle in AAF organization.
††See below, Chapter V.

### **Development of The Air Staff**

THE BASIC RESPONSIBILITY of a military organization headquarters is planning for the achievement of the mission of the agency it serves. For a long time over-all planning for Army aviation was the province of the War Department General Staff. The degree of planning that could be done by the air arm was closely interwoven with the movement for autonomy, and it was not until an appreciable degree of autonomy was attained that a true air staff materialized. The Air Staff's gradual emergence, which can be detected in the shifting activities traced in the preceding chapter, constitutes one of the most significant trends in the reorganization of the internal structure of the air arm.

In addition to a planning staff in headquarters, it is necessary to have operating offices which implement and provide for the execution of plans. The question of whether the planning and operating staffs should be lodged in a single set of offices or whether they should be separate long proved to be troublesome. In the June 1941 organization, in theory at least, the Air Staff was the planning agency and the divisions of the OCAC constituted the operating staff. This division of responsibility was consciously adopted in the AAF organization of March 1942. The attempt was made to separate completely the planning from the operating functions by making the A-staff responsible for establishing broad policies and plans and leaving to the directorates the details of their execution. Experience soon indicated, however, that this division was undesirable, and the policy and operating staffs were integrated in March 1943.

#### The Policy Staff

The War Plans Section in the Training and Operations Division, OCAC concerned itself with

strategic estimates for the War Department, general legislative proposals, coordination of regulations concerning fundamental tactical principles and organization, and preparation of specific war plans and legislation for the five-year program.1 In June 1930 this section was elevated to division status. The Plans Division was charged with making recommendations to the Chief of the Air Corps on all matters of Air Corps policy. Established as a separate planning unit, it was the OCAC's only division that did not have supervisory or operating functions. In that respect, it possessed true staff characteristics. The functions of the Plans Division included war planning, establishing personnel policies, scheduling procurement programs, mobilization planning, approving tables of organization, allocating units, construction planning, coordinating proposed legislation, and harmonizing the materiel and personnel programs with each other and with the budget. Indicative of the importance of the role the Plans Division was expected to play, a brigadier general, one of the two Assistant Chiefs of the Air Corps, was named its chief.

The reaction to the new position of the planning agency was not entirely favorable. Although some individuals complained of a division of responsibility, the Chief of the Personnel Division, Maj. J. C. McDonnell, set forth reasons for the Plans Division as well as the objections to it. He pointed out that before the creation of the division the organization of the OCAC had been along standardized lines, but that there had been insufficient time for the division chiefs to work out detailed studies and plans to insure proper development of the Air Corps. In addition, it had been felt that the "staff" had lacked continuity. The feeling had

been widespread that this defect might have been corrected by strengthening the War Plans Section of the Training and Operations Division. The Plans Division had been created, however, and its members had taken over the policy functions as well as many of the detailed administrative matters of the other divisions.<sup>2</sup>

Major McDonnell complained that the division of usual "staff" functions had resulted in 1) loss of economy in personnel through duplication of effort, 2) loss of direct leadership by the head of the "staff" over members who were putting his directives into effect, and 3) a division of responsibility which tended to develop misunderstanding, lack of confidence, and loss of efficiency. These conditions could be corrected, he thought, by abolishing the Plans Division and strengthening the old War Plans Section.<sup>3</sup>

The objections raised did not bring the results desired by the Personnel Division. The next year, however, the Plans Division was reduced to the same echelon as the other divisions and was no longer headed by an Assistant Chief of the Air Corps. It retained division status until 1935 when it was once again relegated to section status in the Training and Operations Division. The following August it was returned to the office of the Executive and given functions similar to those delegated to it in 1930.<sup>4</sup> It remained a section until 1940 when it was once more established as a regular division.

The continuing problem of separating policy from operating functions—an acute issue in 1942 and 1943—was a concern of Col. Rush B. Lincoln. Chief of the Plans Section, in 1937. In reply to a request from the Chief of the Air Corps for suggested changes in organization, Colonel Lincoln said he had no changes to propose, but he thought that a number of operations problems had been assigned which should have come to Plans only for coordination after they had been studied by other offices. Also, the divisions were still acting on matters which they had considered before the Plans Section was organized. Those divisions, he maintained, should be restricted to operating activities, and similarly, "policies having been determined, Plans Section should not operate other than as a Coordinating Agency." The Plans Section should function independently and report to the Executive only to keep him informed of action being taken to prevent confusion and overlapping.<sup>5</sup>

The problem of the separation of policy and operating functions appears to have been latent for the next few years.

In the summer of 1938 the Plans Section was directed to make weekly activity reports to the Executive. These documents reveal that the office concerned itself with such specific subjects as the procurement and training requirements of troops for mobilization; the use of "double combat crews"; the make-up of the balanced program; the use as navigators, bombardiers, or observers of West Point men who had been eliminated from pilot training; comparison of air estimates between the United States and other countries; flying time and flying pay; desirability of a war reserve of airplanes; utilization of commercial schools to train military flyers; the use of courts of inquiry to investigate aircraft accidents; efficient utilization of educational orders; review of the Air Corps Field Manual; the Hawaiian Defense project; and several secret studies not listed.6 During 1938 there were only four officers to handle these varied and significant problems of the Plans Section. The next year, when the expansion program began, the personnel was increased to nine and then to twelve.

The coming of the European conflict brought the vital importance of planning more strongly to the attention of Air Corps officials. Consequently, on 2 May 1940 it was announced that Plans was once more a division and was to be headed by Brig. Gen. B. K. Yount.7 It was thought imperative that "plans for organization, equipment, training, and employment be carefully considered to insure thorough coordination of all essential factors and to produce maximum progress." The Chief of the Plans Division was also charged with coordinating the work of three experimental and tactical agencies: the Air Corps Technical Committee, the Air Corps Board, and the 23d Composite Group. The division also was to establish "priorities on all research, development, and test projects . . . and the allocation of funds."

Under this new status the division had on duty its chief and 12 officers assigned to the four sections: personnel and legislation; operations, mobilization, and special projects; equipment, supply, budget, and program; and ordnance. By November 1940 there were six sections—dealing with personnel, intelligence, operations, materiel, war, legislation—and miscellaneous plans. The first four of these corresponded roughly to the regular

staff designations, and in April 1941 they were termed G-1, G-2, G-3, and G-4.

The achievements of the Plans Division were not considered to be as high in quality as they should have been. In May 1941 Capt, James M. Farrar of the Administrative Research and Statistics Section reported that the "lack of objective planning in many of the sections and divisions is evident. . . . The need for over-all planning and the establishment of certain general planning policies is likewise apparent." This shortcoming could be partially overcome by the employment of highly trained civilian analysts who would serve as "administrative assistants and divisional planning technicians." In the proposed reorganization, Captain Farrar suggested that the efficiency of the plans agency might be increased by placing it in the office of the Executive, OCAC.8

Before any reorganization of the OCAC was carried out, a more significant change took place in the air arm structure. On 20 June 1941 the Army Air Forces was created to coordinate the activities of the OCAC and the Air Force Combat Command. The Air Staff was the main headquarters component of the new agency. This body was formed by removing the major portion of the Plans Division from the OCAC and placing it on a higher echelon. The sections of the Plans Division were designated as A-1, A-2, A-3, and A-4, while the war section and a portion of A-3 which had dealt with war plans became the Air War Plans Division. This new staff was to assume the air planning functions formerly performed by the War Department General Staff. It was to prepare "essential overall plans for the Army Air Forces." Its operating functions were "confined primarily to preparing those policies, directives, and instructions essential to directing and coordinating the activities of the major components of the Army Air Forces." This staff was, therefore, a policy agency. The operating functions were performed by the staffs of the Commanding General, Air Force Combat Command and the Chief of the Air Corps.9 The charging of the Air War Plans Division specifically with the preparation of "overall plans for the control of the activities of the Army Air Forces" created the possibility of a conflict of jurisdiction within the Air Staff itself. This grant of authority, however, was possibly intended to place the Air War Plans Division in a position

where it could coordinate the work of the other staff components.

The newly created Air Staff was not free from difficulties arising from outside cources. There had been opposition to the creation of such an agency on the ground that the War Department General Staff would no longer be a general staff if its functions relative to air activities were delegated to an air staff. After its creation there was considerable difficulty in delimiting jurisdiction between the two staffs, and not all of the "A's" were satisfied with this division of responsibility.<sup>10</sup>

Although the members of the Air Staff had only recently been in the OCAC and were concerned primarily with the development of the air arm as a whole, their positions as assistant chiefs of air staff were quite different from what they had been in the Plans Division. No longer did they have direct access to the various divisions of the OCAC; the channel of communication was through the Secretary of the Air Staff, the Air Adjutant General, and the Chief of the Air Corps. 11 Thus, the responsibility of the Air Staff was lessened by the authority retained by the Chief of the Air Corps, and the efficiency of the staff decreased because it often did not know to which of the numerous divisions of the OCAC the operating functions had been assigned.

The division of responsibilities created friction between the Air Staff and the OCAC. The Air Staff tended to by-pass the Chief of the Air Corps by issuing orders directly to the divisions and, even more disastrous to the development of a true policy staff, to assume operating functions. Another complicating factor was the retention in the OCAC of a Plans Section, a portion of the former Plans Division. The possibility was always present that this remaining group would resume the performance of the functions formerly charged to the entire division. As a matter of fact, this remnant was charged by the OCAC on 29 August with many of the same functions performed by the Air Staff.<sup>12</sup> The unsatisfactory relationship between the Air Staff and the OCAC became more acute in December 1941 when General Brett was assigned to duty in the Pacific and an Acting Chief of the Air Corps was appointed. The OCAC was reorganized and informal communication between its divisions and the Air Staff was forbidden.\* The most immediately noticeable result of this

<sup>\*</sup>See Chart 9, p. 27.

action was a more rapid transfer of operating activities to the Air Staff.\*

Several months before, on 10 September 1941, the Plans Section had been requested to undertake a major management project for the Air Staff. It was to study the Air Staff, its duties, functions, and interrelationships with other agencies in the Army Air Forces and with divisions of the General Staff, as well as procedures and systems of communications.13 The only study by the section pursuant to this request was a report which recommended the employment of civilian specialists in the Administrative Division.<sup>14</sup> It was perhaps in response to the Air Staff's request that the Wallace Clark Company, a New York management engineering firm, was engaged in the fall of 1941 to make a survey of it. The results of the Clark Company's intensive studies of the various Air Staff offices were submitted to Brig. Gen. M. S. Fairchild, Executive, OCAC, between 9 October and 7 November 1941†

The Clark survey considered the internal organization, functions, and responsibilities of each of the staff offices and made certain recommendations for reorganization and reassignment of duties. It pointed out that the first consideration was to expand the planning activities of the staff and to delegate all the operating functions to the appropriate divisions of the OCAC. The report noted that the Air Staff had been hastily set up, and its assumption of operating functions was ascribed largely to the tendency of the staff members to assume detailed work which they understood and in which they could be successful rather than venture into the fields of planning and policymaking, where their success was far less certain.††

Secondly, there was a necessity for standardizing office methods in order to prevent a great diversity of procedures and practices in the conduct of business. The Clark analysts felt that the establishment of necessary standardization had been hampered by the false conception that a rigidity of procedure would weaken the command of the subordinate, or junior, officer. They held that

fixation of practices and procedures was in no way connected with the problem of delegating responsibility and authority. Brig. Gen. Byron E. Gates of Management Control stated that he felt that the greatest value of the Clark study was in "bringing home" to the Army officers the necessity of standardization.<sup>15</sup>

The third major recommendation of the Clark Company was that civilian personnel be increased. It was pointed out that there was a scarcity of regular Air Corps officers and that this shortage was certain to become more acute. This condition could be offset and greater efficiency obtained by the employment of trained civilians. The Clark report emphasized the fact that since the Army Air Forces might be in "active warfare in the near future," it was imperative that the personnel of the Air Staff be "brought immediately to a wartime basis, with most of its work done and supervised by civilians for the duration."

Also, there was need for developing and stabilizing Air Staff policies. The Army, the report noted. prior to 20 June 1941, had made little attempt to formulate a complete set of policies applicable to the AAF. On that date the Air Staff had been created, and since then many problems had been encountered which, of necessity, had been considered individually and without benefit of precedents. Naturally, many decisions had been based on personal experience and recollection. The time had come when policies should be established by means of covering directives; otherwise, fluctuation and delayed action might be disastrous in a period of action. Finally, the Clark report recommended. plans should be made to meet definite time objectives. The first step toward adequate planning was the fixing of responsibility in particular fields. Then, after the objective had been decided upon, careful timing and synchronization of every phase of AAF preparations were necessary. The rate of movement was of greater importance than the date of completion. Time and quantity should be closely correlated in the achievement of the AAF objective. To attain this end, close collaboration between all the staff divisions and the Statistics Section of the Air Staff was necessary.16

The Clark study was concerned only with the proper distribution of functions among the existing units of the Air Corps structure. It was not intended that the soundness of the organization itself should be considered.<sup>17</sup> The more fundamental

<sup>\*</sup>The Appointment and Procurement Section of Military Personnel and the Communications Division were the agencies transferred to the Air Staff at that time.

<sup>†</sup>The contract for this study was made by the Air Corps because the Air Staff had no power to make such commitments. †The Clark report stressed the fact that there were several dangers in detailed work: (1) it provided a refuge for an officer who did not feel capable of planning, (2) it took up the time of an officer who was able to plan, and (3) it stunted "the development of an officer who could learn to plan on broad lines."

### ARMY AIR FORCES ORGANIZATION 24 DECEMBER 1941

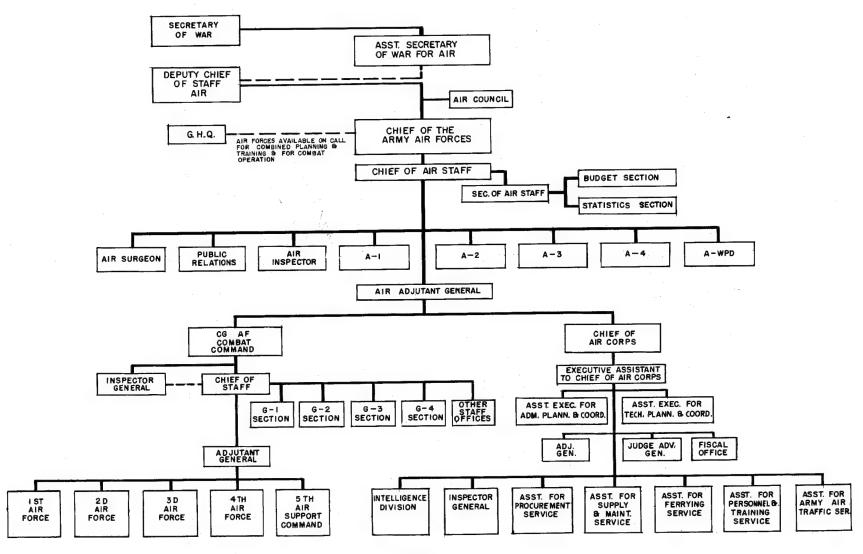
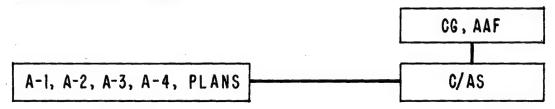


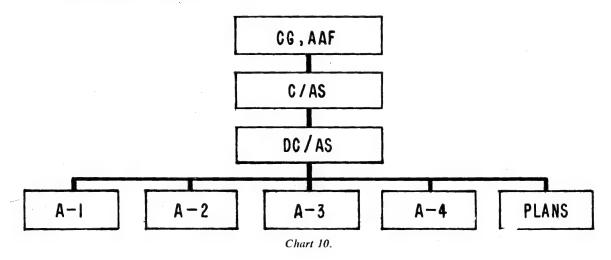
Chart 9.

# PROPOSED POLICY STAFF REORGANIZATION 1941-42

### A. CONSOLIDATED GROUP



### B. COORDINATE GROUP



problem of complete reorganization had been undertaken by the consultant committee.\* During the course of this reorganization study the possible abolition of the policy staff was considered, but the War Department directive left no alternative but to retain it and also to create an operating staff. The Bureau of the Budget members of the reorganization committee wished to establish the policy staff as a consolidated group attached to the Chief of the Air Staff rather than as a coordinate group. †18 This concept by the Bureau of the Budget was based on the conviction that the staff would function in the unified manner required if it were kept small and attached directly to the office of the Chief of the Air Staff.

The traditional military concept prevailed in the March 1942 reorganization, however, and the policy staff was established as a group of coordinate offices.†† The function of planning, and establishing policies, was lodged in A-1 (Personnel), A-2 (Intelligence), A-3 (Training and Operations), A-4 (Supply), and Plans. ††† The Plans office was viewed as the coordinating agency for the other four, since in theory it should not concern itself primarily with war plans. Once again, however, the regulations were not specific enough in delimiting function and responsibilities. The five units were to "participate in the planning, scheduling, and control of programs for the attainment of the mission of the Army Air Forces and the translation of approved programs into the requirements peculiar to each division." Each "A" was to formulate policies governing its own activities, and the necessary synchronization was to be furnished by Plans. After the policies, plans, and programs had been established by the policy staff, they were to pass to the operating staff or directorates for implementation.

#### The Operating Staff

Although there was no clear delineation of responsibilities between policy and operating agencies in the June 1941 reorganization, it was intended that the Air Staff should determine policy and that the OCAC should do the operating, or take the necessary action to implement and effect the policies established by that staff. The OCAC, however, continued to plan, and the Air Staff assumed many of the operating details which supposedly were the activity of the OCAC. In March 1942, however, an operating staff (the directorates) was established as a result of the recommendations of the McNarney Committee.

The War Department Special Staff-Chief of Infantry, Field Artillery, etc.—serving in the capacity of functional specialists for the General Staff—presented some parallels for parceling headquarters responsibilities. However, several Air Corps officials had visited England and appear to have been favorably impressed with the directorates in the Royal Air Force. As a result, at least two months before the major reorganization, some "test" directorates were established and the concept of the functions of such officials began to become more clearly defined. The rapidity of technological advances, the necessity for highly specialized information in the many aspects of aerial warfare, as well as the functional inadequacies of the staff as then constituted, caused careful scrutiny to be given to the problem of distributing functions among the staff offices:

The officers responsible for planning the basic feature of the reorganization found one serious defect in this [traditional] type of staff breakdown. A-4, as the supply division, was concerned with the characteristics of all kinds of aircraft—heavy and light bombers, dive bombers, pursuit and observation planes alike. Similarly, A-3 was concerned with policies for training bombardment crews and fighter crews and for training for independent air operations and for air support of ground troops. Nobody was responsible for the development of bombardment squadrons as such-with all the elements of materiel design and personnel training that go into making an effective combat unit-nor fighter or liaison groups as such. What was lacking were specialists in the functional phases of aerial combat.10

Several concepts of the directorate's role may have been involved in the reorganization activity, but the one stressed most for the Directorate of Military Requirements—the most discussed of the new offices—was that of functional specialists engaged in "military research."20 Nearly one year later it was noted that the operating echelon was "charged with the performance of the typical functions found in an air task force and that the personnel selected to discharge these functional responsibilities should be delegated broad discretion to act on behalf of the Commanding General on those

<sup>\*</sup>See above, pp. 8-9, 20. †See Chart 10, p. 28. ††See Chart 11, p. 30.

<sup>†††</sup>The G-2 functions of the disbanded Air Force Combat Command were absorbed by A-2, but the G-3 and G-4 functions were assigned to the Directorate of War Organization and Movement and the Directorate of Base Services, respectively.

### ARMY AIR FORCES ORGANIZATION 9 MARCH 1942

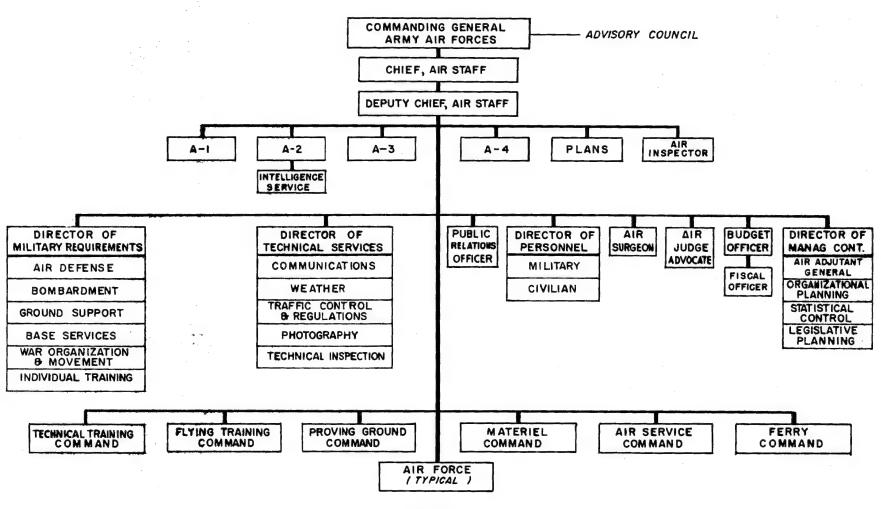


Chart 11.

matters peculiar to the respective type functions."<sup>21</sup> The obvious necessity for a logical grouping of activities seems to have been the motivating force in the formulation of some of the other directorates.

As finally established, there were three main directorates: Military Requirements, Technical Services, and Management Control.\* The Directorate of Military Requirements was intended as the medium through which the lessons of combat would be transmitted and reflected in modifying training and procurement programs. It was to coordinate the work of the Directorates of Air Defense, Bombardment, Ground Support—the type directorates-War Organization and Movement, Base Services, and Individual Training. The chiefs of the type directorates were to be experts on all phases of bombardment, fighter, and air-ground support warfare and were to develop tactics and techniques and determine requirements of aircraft, equipment, and personnel for their respective activities. War Organization and Movement, originally intended as a separate directorate, was to perform the functions relating to the organization of units, the preparation of troop-movement orders, the assembly of task forces, correlation of the "allocation of aircraft and personnel to insure distribution in accordance with approved policies," and most G-3 functions of the disbanded Air Force Combat Command. The supply allocation function, formerly in A-4, was not placed with the aircraft and troop allocation function which was moved from A-3. It was given to the Directorate of Base Services along with the G-4 functions that had been performed by the Air Force Combat Command and the Buildings and Grounds Division, OCAC. In addition, the Directorate of Base Services was to review training programs and recommend changes that would improve the ability of that directorate to meet military requirements, and, among other things, to coordinate the planning and construction necessary for the establishment of new military air routes. The special staff of representatives of the other branches of the Army was placed in Base Services. The Directorate of Individual Training was the sixth component of the Directorate of Military Requirements. This directorate was to maintain liaison with the Technical and Flying Training Commands; coordinate training standards (relative to individual training) established by the type directorates and Base Services; and coordinate for the several commands the primary, basic, and advanced technical and flying training activities which applied to individual training.

Although the above grouping of functions within the various subdirectorates appears generally logical, it is difficult to see how a number of these activities fit the concept of military research which had been stressed as the chief aim of the Directorate of Military Requirements. Most noticeably, all functions of War Organization and Movements, the supply functions of A-4, the G-4 activities of the disbanded Air Force Combat Command, and the activities of the Buildings and Grounds Division scarcely conformed to the military research specification. The Directorate of Technical Services contained the next largest divisional grouping. Its major components, formerly parts of the Training and Operations Division and more recently the Army Air Traffic Services, were Communications; Weather; Photography, Maps and Charts; Traffic Control and Regulations; and Technical Inspection.\* The first three of these can justifiably be included in the military research category; it would be more difficult to attribute such aspects to the other two. Many of these functions had been previously performed by the OCAC; others were formerly the responsibility of civilian agencies. The unprecedented expansion of military aviation and the entry of the United States into the war required that additional attention be given to these matters and that they be brought wholly under military control. The operating functions of the Directorate of Technical Services seem to have been a more important consideration than the functional specialist idea, and no fundamental realignment of duties similar to that of the Directorate of Military Requirements was evolved.

The Directorate of Personnel was a smaller unit formed by the combination of the military and civilian personnel functions of the OCAC, some functions of A-1, and some from the Air Adjutant General. Civilian and military personnel functions had been separate except for a short period in 1941, and even though "military and civilian personnel might involve totally different practices, there remained instances where coordination was necessary—particularly, decisions needed to be

<sup>\*</sup>See below, Chapter VI, for a discussion of Management Control.

<sup>\*</sup>The War Department had provided for communications and weather commands but neither was ever activated.

made as to whether many of the positions being filled by officer personnel could be filled well by civilians."<sup>22</sup> Other motives in combining the two personnel sections were to allow the chief of civilian personnel activities more direct access to higher authority and to decrease the number of officials in the Headquarters, AAF who would be reporting directly to the commanding general.

The Public Relations Officer, the Air Surgeon, the Air Judge Advocate, and the Budget Officer completed the operational staff. These offices performed the traditional functions, and none was considered a directorate in the sense of those mentioned above.

In viewing the grouping of activities and functions in the operating staff offices there are three important objectives to be noted: (1) decentralization or forcing down of responsibility and authority to the lowest possible echelon and the employment of all possible short cuts; (2) control for the Commanding General in a policy-making staff unhampered by operating activities; and (3) a merging under the control of the functional specialists in the Directorate of Military Requirements of activities in connection with design, development, and procurement of weapons on the one hand with training and tactical activities in the employment of those weapons on the other.<sup>23</sup>

The directorates seem to have had one singularly meritorious feature: the marking of a clear-cut line from the production or initiation of any specific item or plan to its final use or execution. Various factors, however, contributed to a departure from the intended functions. Among these were the assumption of planning functions, detailed direction of field activities, and absorption in minor particulars. The failure to establish an operational training command to perform the training functions of the dissolved Air Force Combat Command

contributed materially toward diverting the directorates from their original purpose. Such an organization, to be headed by Lt. Col. J. H. Doolittle, was provided for in January 1942, but the expanding concept of the directorates and the realization that the mission of the AAF was to be restated seem to have precluded its actual establishment. However, the necessity for centralized control over this type of training during the transitional period following the March reorganization was realized. Maj. Gen. Carl Spaatz, pending his departure overseas, was designated supervisor of operational training units and in that capacity was to be furnished copies of all papers pertaining to training.24 The transfer of these duties was to be initiated by conferences with General Spaatz on 7 May, and after 9 May responsibility for operational training was to be a "primary obligation of the entire Air Staff." Although this responsibility would involve almost all of the divisions of the staff, it was to be centered in A-3.25

The need for some agency to replace the Air Force Combat Command in regard to operational training units was still felt in June of 1942, for the Director of War Organization and Movement then suggested an agency to govern and control all this activity. Such an agency, he stated, would eliminate inadvertent interference with the people who had to do the training. He emphasized that the training machine was in the field and not in Headquarters.26 With the several air forces engaged in different types of training activities, there had to be some coordinating agency. This function came to rest primarily in the directorates, and their activities became further removed from military research. The departure from the original plan, as well as changed conditions, resulted in the abandonment of the operating staff in March 1943.

### **Application of The Command and Bureau Principles**

THE WAR DEPARTMENT directive effecting the reorganization of 9 March 1942 stipulated that there should be a threefold division of activities among the policy staff, the operating staff, and the commands. But as indicated in the preceding chapter, the delimitation of responsibilities between the two staffs in AAF Headquarters was not clearly defined. Also, many of the functions assigned to the operating staff were delegated to the field when division of functions between the policy and operating staffs came to an end in Headquarters in March 1943. After that date, however, the command principle became more firmly established as a feature of AAF organization.

The adoption of the command basis—though with some reservations—for the organization of field activities represented the culmination of a trend in AAF structure. Although in March 1942 the Air Service, the Ferrying, and the Technical and Flying Training Commands, were in existence, many field activities were organized on the bureau basis. From the functional standpoint it seemed to matter little which of these principles was adopted. The entire problem of Headquarters-field relationships, however, was involved in the choice, and in that respect the adoption of one or the other was of significance.

The differences between the command and bureau structures are fundamentally the differences between military and civilian types of organization. The command structure is characterized by a hierarchical or pyramidal structure with the chain of authority direct from the commanding officer of one echelon to the commanding officer of the next. This authority may be delegated to staff officers, but final responsibility is retained by the

commanding officer. On the other hand, the bureau principle is most frequently applied to governmental agencies of a nonmilitary character and, on occasion, to military supply agencies within the Zone of the Interior. The hierarchy of official-dom is analogous to that of the command structure, but in the bureau structure there is no attempt to make a division between the operating and policy functions of a headquarters. Authority and responsibility are delegated to the bureau head, who performs dual functions as head of an operating agency and as an administrative or technical adviser.

The command and bureau principles have found concurrent usage in the organization of the air arm. The GHQ Air Force, created in 1935, was intended as a combat arm and was organized, therefore, strictly on a command basis. Authority was direct from the commanding general to the commanders of the wings, and thence to the commanders of the subordinate units. The OCAC was the training and supply element and did not follow the command pattern exactly. Fundamentally, the OCAC consisted of divisions—not staffs-which frequently did not correspond closely to the usual staff designations. The controlling agency was not a headquarters but an office, and the highest officer was a chief, not a commanding general. The chief functioned through an executive instead of an adjutant general, while the routine of mails, files and other services was under the supervision of a miscellaneous or administrative division. Thus, this agency conformed rather closely to the bureau organization.

Although the command pattern was not applied to the highest echelon of the OCAC, it had been

applied at various times prior to 1942 in the relations between that office and the field. The two major field activities were training and supply, and it was in regard to those that there had been a shifting between the command and bureau principles. The main question was whether an Air Corps division in Washington should encompass both the Headquarters and field activities. In the case of supply matters, the answer was usually in the affirmative, thus conforming to the bureau structure. The training center, on the other hand, was usually organized as a lower echelon of authority over the training center commanders, with the training division in Washington serving in a G-3 capacity. However, at times the bureau structure was applied to training and the command structure to materiel activities.

The organization and relationships of the Air Corps materiel agency have been the subject of more controversy than have those of any other portion of the air arm. The Materiel Division was organized in 1926 on the bureau basis and, though located at Wright Field, was considered an integral part of the OCAC in Washington. A subordinate unit of the division, known as the Liaison Section, was in Washington. By virtue of its physical location this subordinate office was in a favorable position to displace the Chief of the Materiel Division as the principal adviser to the Chief of the Air Corps on materiel matters. In 1935 this liaison office was expanded and designated the Supply Division. It was charged with furnishing the Chief of the Air Corps with advice and aid on supply matters, with coordinating the preparation of plans and policies governing Air Corps supplies, and supervising and coordinating supply plans and policies approved by the Chief of the Air Corps. The Chief of the Materiel Division objected to the Establishment of the Supply Division and maintain that he was the direct representative of the Chief of the Air Corps in all matters of procurement, experiment, and production. He viewed the establishment of the new division as creating a difficult situation and as a cause of delay in action.2 The bureau structure had been compromised, though not abandoned, by the creation of the Supply Division, and it was not until 1939 that the Materiel Division was again considered an integral part of the Washington office of the Chief of the Air Corps.

In 1936 the command structure replaced the

bureau organization in materiel matters. Following studies by the Bryden Board\*3 and by G-4, the Chief of the Air Corps was directed to curtail the authority of the Materiel Division at Wright Field and to "assume full direction and control of Air Corps materiel matters" in his Washington office.4 The fulfillment of this directive "altered the anomalous situation" that had existed for a year and definitely put the command principle into effect. The Chief of the Supply Division, who was at that time a major, became the principal policy adviser on materiel matters, while the brigidier general who headed the Materiel Division and was an Assistant Chief of the Air Corps was excluded from the "inner sanctum."

If the Chief of the Materiel Division could not retain his main advisory and policy-making position while at Dayton, the logical and obvious thing to do was to bring him to Washington. A move to accomplish this was initiated early in 1937. The Chief of the Supply Division objected to the proposed move, which would involve the abolition of the Supply Division, and maintained that such a step would destroy the existing close coordination as well as cause delays and inefficiencies.5 Although several of the subordinate officers in the Supply Division pointed out the duplication of effort between Wright Field and the Washington division, only one, Lt. Col. G. E. Brower, felt that the Supply Division should be abolished. He held that the work of any section that was not already being done at Wright Field should be transferred there. As an alternative, he proposed that the Chief of the Materiel Division be brought to Washington. If the existing offices were to continue, he stressed the necessity for curtailing the growth of the liaison office and for preventing conflicts between the Supply and Finance Divisions in Washington.<sup>6</sup>

The Supply Division, however, was not reduced in status until 1939 when Brig. Gen. George H. Brett, Chief of the Materiel Division, launched an attack upon it. In March 1939 he prepared a lengthy statement of supply policies and responsibilities and submitted it to the Chief of the Air Corps for approval. The keynote of this document was that the Assistant Chief of the Air Corps assigned as Chief of the Materiel Division was the "immediate adviser to the Chief of the Air Corps on matters of materiel." The Supply Division was viewed as a liaison and coordinating office. This

<sup>\*</sup>Col. William Bryden was chairman of this board.

paper was circulated through AAF Headquarters and received no particular criticism from the Supply Division, which thought that it contained no violations of the War Department directive of 1936. The Plans Division, however, was of the opinion that many of the statements on policy constituted an "attempt to evade" the spirit, if not the letter, of that directive.<sup>8</sup>

Appointed to settle this issue a board of officers presented a revised directive which conceded most of General Brett's points. The Chief of the Materiel Division was made the "immediate" adviser on materiel and supply matters, and, under the direct supervision and control of the Chief of the Air Corps, had jurisdiction over all "materiel matters delegated to him." This action re-established most of the features of the bureau structure for the supply agency. The Supply Division was removed from its advisory position and was charged with coordinating plans and policies which were prepared by the Materiel Division. It was also to serve as liaison agency with the Assistant Secretary of War, the War Department General Staff, and other agencies.9

In an effort to centralize Air Corps materiel matters, the Chief of the Materiel Division and the Industrial Planning Section of that division were moved to Washington in September 1939.<sup>10</sup> The Supply Division was officially dissolved in November 1940, and the Materiel Division office in Washington was greatly expanded. Planning sections corresponding to the operating activities at Wright Field were created. The chief of the division was also charged with all materiel liaison matters.<sup>11</sup> Activities in the materiel field had thus reverted to an orthodox bureau structure and remained on that basis until March 1942.\*

Although supply activities were organized on the command basis for only a few years, the training structure conformed to this pattern during most of the pre-1942 period. The evidence is not always clear, but the organization at Randolph Field seems usually to have been a lower echelon of command directly responsible to the Chief of the Air Corps in Washington. This appears to be substantiated by the fact that the training organization was not ordinarily considered an integral part of the Washington office of the Chief of the Air Corps as was the Materiel Division.

In 1930 the head of the Training and Operations Division in the OCAC was a brigadier general located in Washington and serving as an Assistant Chief of the Air Corps. This suggests that this officer may have had authority over field operations corresponding to the authority exercised by the Chief of the Materiel Division. If such was the case, the bureau structure was in effect. Between 1932 and 1938, however, the head of the Training and Operations Division was either a major or lieutenant colonel, while the brigadier general located at the training center was in the chain of command and directly under the Chief of the Air Corps. There was nothing to indicate that the Training and Operations Division, or the Training Section of it, was considered as a liaison section responsible to the general in the field as was the Materiel Liaison Section. Early in 1937 it corresponded rather to the Supply Division at its height—a policy-making unit charged with the direction of training methods, programs, curricula, and facilities at the Air Corps Training Center, the Air Corps Tactical School, and the Air Corps Technical School.<sup>12</sup> Apparently, then, the command structure was in effect during those years.

The Headquarters-field relationships in training do not appear to have been of the volatile character found in the materiel activities. However, Brig. Gen. B. K. Yount, in command at the Training Center, in January 1939 was brought to Washington to head the so-called Training Group, which included activities from the Training and Operations, Personnel, and Reserve Divisions.13 This organization lasted only until October 1939 when the Training and Operations Division was reestablished and the Training Section was once again given broad responsibilities.\* In November 1941 the Training and Operations Division was divided into separate Training, Operations, and Communications Divisions and the Training Division was given authority to "organize and administer all Air Corps Special Service schools, except the Air Corps Engineering School and School of Aviation Medicine."14

The great expansion of activities after 1939 brought about several changes in materiel and training activities. Late in 1940 General Brett proposed the creation of an agency "to meet the increasing requirements for the technical supply

<sup>\*</sup>The predecessor of the Air Service Command, however, was created in March 1941.

<sup>\*</sup>All operational training was under control of the GHQ Air Force.

and maintenance of army aircraft."15 In compliance with this suggestion the Air Corps Provisional Maintenance Command was established in March 1941 to perform the many functions of the Field Services Section of the Materiel Division. In the last part of April the provisional aspect was dropped,16 and on 17 October 1941 this organization became the Air Service Command.17 One month later the Maintenance Section of the Materiel Division was designated as the liaison section for the Air Service Command. 18 On 11 December the Air Service Command was removed from the jurisdiction of the Materiel Division,19 but the separation was not a clear one, and there were complications and overlappings as to duties and responsibilities.

Training activities also had undergone division by the creation of two commands. In March 1941 the Technical Training Command had been created to supervise all nonflying training. Nine months later the Acting Chief of the Air Corps, Maj. Gen. Walter R. Weaver, recommended that a Flying Training Command be created to coordinate the many activities of flying training, then decentralized in the three training centers.<sup>20</sup> The recommended command was created on 23 January 1942.<sup>21</sup>

There were, then, four commands in existence at the time of the March 1942 reorganization: Air Service, Ferrying,22 Technical Training, and Flying Training. The command and bureau principles had been complicated, however, by the creation of the Army Air Forces in June 1941. Headquarters, AAF was organized on a command basis, and the Air Force Combat Command was made responsible to this new agency rather than to General Headquarters. The effect on the OCAC was more far-reaching. It actually amounted to a splitting of that office into Air Staff and Air Corps with the latter responsible to the former. The channels of communication were clogged by the existence of an Adjutant General on the Air Staff and the prohibition by the Acting Chief of the Air Corps of direct communication between the Air Staff and divisions of his office. One obvious answer was the elimination of one of these levels.

The basis of organization of the field activities presented an equally baffling problem. The entire realm of Headquarters-field relationships was involved in the adoption of the bureau or command principle. As long as the personnel of the Air Corps

remained small and field activities were confined primarily to training and materiel matters, it appeared to make little difference whether the bureau or the command principle of control was used. The expansion program, however, brought about an increase of personnel from 20,503 on 1 July 1939 to 152,569 two years later. Lend-lease commitments soon vastly augmented the field activities. After the entry of the United States into the war in December 1941, the multifarious activities of the AAF were spread to the far corners of the world, and the ever more rapid expansion increased the personnel to the half-million mark by March 1942. It was thought desirable, therefore, to adopt an organization that would allow a large degree of decentralization of responsibilities.

Three means of controlling field activities had been applied in regard to materiel and training operations. Two of these conformed to the bureau structures: first, a liaison office in Washington serving division headquarters in the field; and second, division headquarters in Washington with the field activities as an integral part of the division. The third was the command structure wherein a division headquarters in the field was on an echelon lower than a corresponding Washington division which served as adviser and aid to the Chief of the Air Corps (or Army Air Forces) in establishing policy. The choice of any of these three systems was open to the air force consultant committee until the War Department stipulated that the command principle should be adopted.

Headquarters was organized in 1942 into the policy and operating staffs, and the field activities became commands. The Air Service, Ferrying, Technical Training, and Flying Training Commands remained, and the Materiel Division and Proving Ground activities were also organized on that basis. The command principle was not adopted without some modifications. As noted above, previously this principle had been applied only when the headquarters of an activity was in the field. The organization of 9 March, however, applied the command structure even though headquarters of some of the commands remained in Washington. Materiel, Air Service, Ferrying, and Flying Training Commands, all of which had headquarters in Washington, conformed, therefore, very closely to the bureau structure. This may have been intended as a transitional stage, in order to keep the commanding generals of those commands

in very close contact with Headquarters, AAF during the initial period of the new organization and the days of greatest expansion. Before the end of 1942, the headquarters of all the commands except Air Transport (formerly Ferrying) had been removed from Washington and definite channels of liaison established.

In the subordination of the Air Adjutant General the reorganization departed sharply from the command principle. That officer was shown on organization charts as an operating staff officer—not in the chain of command—and his duties were so restricted as to make him a chief of central administrative services. The various directors performed one of his customarily major functions, the issuance of unpublished directives in the name of the Commanding General, AAF.

This compromise of the command structure was strongly challenged by Col. W. W. Dick, the Air Adjutant General, in his June 1942 comments on the working efficiency of the new organization. He felt that there should be a clear-cut distinction between a bureau such as the War Department and a command such as the Army Air Forces or Army Ground Forces. The principles, he maintained, had been confused, and prerogatives of command had been lodged in bureau-functioning directorates. Such a reassignment of prerogatives, however, did not and could not relieve a commanding general of his personal command responsibilities. Colonel Dick asserted that the directorates, although designed to be operating agencies, had overreached themselves and become administrative.23 He recommended that the three-fold division of activities be made effective in AAF Headquarters by assigning 1) planning and policy-making to the A-staff, 2) operating functions to the directorates, and 3) strictly administrative functions to the Air Adjutant General. He viewed the Air Adjutant General as the Commanding General's "outer office," and as a neutral agency needed to coordinate the directives issued freely by the various directorates.24 A proposal was made the next month to redefine the duties of this officer in order to make them conform to the conventional duties of the adjutant of any command,25 but the suggestion seems to have been dependent on so many other factors that it was not carried out.

Headquarters, AAF had definitely departed

from the command principle in another respect: the staff had begun to exercise command authority instead of its legitimate advisory and planning functions. Also, the staff sections, especially the directorates, began to break down according to the type of activities in the field that fell under their jurisdiction. The Headquarters units were exercising policy-making authority in particular fields without any of the responsibility for actually getting the job done. The ultimate in this aggrandizement would have been the adoption of the proposal in the comments of the Director of Military Requirements on 7 June that the Flying Training Command be eliminated and that the Director of Individual Training "through his [!] three well-organized training center commands . . . administer the flying training program . . . without the interposition of the Headquarters, Flying Training Command\*26 This suggestion was made despite the fact that the director involved was a colonel and the commanding officer of each training center was a major general. However, contrary opinions of the Commanding General, Flying Training Command and the Assistant Chief of Air Staff, A-3 were upheld, and the command remained. Its headquarters was moved from Washington to Fort Worth on 1 July 1942, and during the succeeding months more command headquarters were moved to the field and liaison offices established in Washington.

From 9 March 1942 to the end of 1943 several changes in commands occurred. On 30 April 194227 the Air Transport Command was formed to supervise and conduct the organization of "air transport units . . . with special emphasis on . . . such units for the movement of air landing troops and equipment including glider-borne troops, and parachute troops and equipment."28 Less than two months later this command was redesignated the Troop Carrier Command, and the Ferrying Command became the Air Transport Command, each performing the same function it had under its former name.29 Shortly thereafter the Air Transport Command absorbed many of the domestic transportation functions of the Air Service Command and, later, many of the duties that had been

<sup>\*</sup>On 9 May the Director of Management Control had already proposed that the Flying Training Command be dissolved and its functions placed as mentioned.

performed by the Military Director of Civil Aviation.\*

Perhaps the feeling that there was a necessity for a final check on operational training under the new organization prompted the formation on 19 June 1942 of the Foreign Service Concentration Command, later known as the I Concentration Command, to check air units before their transfer overseas. Because difficulties of many kinds were encountered, it was decided that the work should be done by units already in existence. Consequently, in the latter part of November the command was dissolved,<sup>30</sup> and its functions distributed among the First, Second, Third, and Fourth Air Forces, and the Air Transport Command.

Two other commands which were later inactivated—Antisubmarine and Flight Control—were created on 13 October 1942<sup>81</sup> and 29 March 1943,32 respectively. The former was to concentrate on the submarine menace, but with the decrease of U-boat activities in the western Atlantic it was disbanded in late August 1943.33 The Flight Control Command combined many of the activities of the directorates of Weather, Communications, and Flying Safety, and the former duties of the Military Director of Civil Aviation. In July 1943 the Communications and Weather wings were transferred from the jurisdiction of this command, and on 1 October 1943 the Flight Control Command was discontinued.<sup>34</sup> A Special Staff office of Flying Safety, headed by a deputy of the commanding officer at Winston-Salem, N.C., was established in AAF Headquarters. 35 Headquarters communications functions were withdrawn from Materiel, Maintenance, and Distribution (MM&D) and Operations, Commitments, and Requirements (OC&R) and placed in another Special Staff office, Communications, which was given a slightly broader authority than was the Washington office of Flying Safety.36 The Weather Wing was made responsible to the Weather Division of OC&R.

When the March 1943 reorganization was under consideration, it was decided to merge the activities of the Technical and Flying Training Commands in one training command and to create a "Personnel Indoctrination Command."<sup>37</sup> The

commanding officer of each training command was called to Washington for a conference on 18 March, and on 23 March a memorandum to each noted that the proposed merger would not be put into effect. In a little more than three months, however, it was decided that the Technical Training Command would be absorbed by the Flying Training Command, which assumed all the functions of the Technical and Flying Training Commands, was activated. This consolidation was intended as a step to use "every available means to achieve the greatest degree of efficiency and economy" and to effect the maximum coordination of training schedules.<sup>39</sup>

Some other air force activities were organized on an exempted status. The Tactical Center\* and the Redistribution Center† were the most important of these. These organizations owed responsibility to the Assistant Chief of Air Staff, OC&R, and the Assistant Chief of Air Staff, Personnel, respectively. These exempted activities of a major nature had less freedom of action than did the commands. Still less autonomy of action was enjoyed by less significant exempted activities. The least degree of freedom, however, was granted to Headquarters offices located in the field, such as the Training Aids Division of the office of the Assistant Chief of Air Staff, Training.

There were, then, at the end of 1943 four types of activities and organizations in the field that exercised varying degrees of freedom of action. In order, these were 1) commands, 2) major exempted activities, 3) minor exempted activities, and 4) portions of Headquarters offices. Not all agencies, however, fitted into one of these categories. The Office of Flying Safety, for example, was considered a Headquarters office. Insofar as the officer who headed the Special Staff office in Washington was a deputy of the commanding officer at Winston-Salem-and responsible to that official rather than to the Commanding General, AAF—the organization paralleled the bureau structure. On the other hand, the manner of handling the flight control functions of this agency was that of a command. This compromise organization was viewed as the best method of handling a problem that almost defied solution. For many months the proper organization for flight control, flying

<sup>\*</sup>Prior to May 1942 the Director of Traffic Control and Regulations performed the duties which were subsequently divided between the Director of Flying Safety and the Military Director of Civil Aviation. Those two officials were also given responsibility for the performance of many of the functions which were previously the duty of the Civil Aeronautics Administration.

<sup>\*</sup>Established originally as the School of Applied Tactics on 12 November 1942. †Established 7 August 1943.

safety, communications, and weather was of vital concern and at the end of 1943 was still being seriously studied.

The history of the field activities of the air arm indicates that there was a shifting between the command and bureau principles, but as the personnel of the AAF grew into the millions and its activities spread around the world, the command principle was favored. One analyst of AAF organization held that if either principle should be adopted, "it would appear desirable that it be adopted consciously and that any compromise in the basic structure be well-considered." If the command structure at the end of 1943 was to be maintained, the necessity of a closely knit, well-manned staff to integrate the activities and to exert

strong policy leadership seemed quite evident. A favorably located and well-staffed program planning and control unit would have contributed materially toward this end.

The ever-recurring rivalry between the field and Headquarters for primacy in policy determination was a definite obstacle to the smooth working of the command structure. This was also one of the main difficulties in the bureau structure. In fact, it seemed to lie at the root of Headquarters-field relationships. The whole problem at the close of 1943 was under constant survey by Management Control, and the solution adopted for each case was the one that lent itself to the most efficient operation of the particular activity involved.

#### The March 1943 Reorganization

THE STAFF-DIRECTORATE-COMMAND principle established in March 1942 remained in effect until 29 March 1943. During this period, however, certain new offices were created and some regrouping of activities was effected. By May 1942 many of the functions of the Director of Traffic Control and Regulations had been removed from the jurisdiction of the Director of Technical Services and delegated to the Military Director of Civil Aviation, who had been established as a separate operating staff officer.1 The remaining functions of the Director of Traffic Control and Regulations, as well as some new ones, were assigned to a new directorate, Flying Safety. This new directorate was charged with the supervision of "inspection and investigation of conditions, practices, and facilities which may affect flying safety and rescue."2

Just prior to the creation of the Flying Safety directorate, comments on the working efficiency of the March 1942 organization were submitted to the Deputy Chief of Air Staff.<sup>3</sup> The three-month test period of the new organization revealed definite weaknesses. Comments came from Head-quarters, AAF and from the field; some were well considered and looked toward a more efficient organization; others seem to have been prompted by less altruistic motives. A large number indicated that the attempt to separate policy and operation at the staff level was unwise and impractical.\*

The most frequent general criticism was that each of the two staffs, instead of confining itself to its respective field, was performing many functions of the other. A-3 and A-4 felt that the attempted separation into policy and operating func-

tions was a mistake, and they recommended that the operating functions taken from them on 9 March be returned. A-4 maintained that planning could not be properly performed without some operating; the various directorates which fell under the policies of the planning staffs should therefore be made operating sections of those staffs.\* A-3 felt that its operations must be legalized in such matters as assignment of fields, control of operational training, and allocation of planes. This action was considered essential for coordination and the elimination of conflicting directives to the field. If the directorates could not be placed under the appropriate staffs, the authority for "independent action" by the type directors-bombardment, ground-air support, and air defense-should be revoked.5 The head of Plans also contended that "plans cannot be drawn without a knowledge of the operational capabilities and limitations." He maintained that policies in time of war were the day-to-day decisions which were made. The solution proposed was similar to that offered by A-3.6

Other comments stressed the facts that 1) a lack of over-all directives by the policy and operating staffs prevented a desirable decentralization; 2) the Air Staff did not know what the directorates were doing and vice versa; 3) there was not even coordination among the "A's" much less among the directorates and between the "A's" and directorates; and 4) the continual changes in policies and procedures were indicative of poor organization and staff work.

The comments from the directorates centered about two points: 1) inadequacy of planning by the Air Staff, and 2) the overlapping of functions and responsibilities. One of the directors com-

<sup>\*</sup>Several of the statements recalled the remarks of Major McDonnell 12 years before. See above, pp. 23-24.

plained that the lack of adequate planning along the A-level had caused much confusion on the operating level. He felt that most of the "serious criticisms" of the organization could be "traced primarily to administrative rather than organizational deficiencies." Since the A-staff had been reluctant to accept its real responsibility, the directorates had been forced to establish their own policies, in many instances "wholly according to their individual ideas."11 The Chief of Management Contral stated later that the A-staff had done little between March 1942 and March 1943 toward setting policy. The exigencies of war necessitated rapid action; decisions were frequently rendered in the highest possible AAF echelon and then carried out by the directorates before the A-staff knew that a policy had been changed.12

Because of the many closely interdependent functions and responsibilities of AAF offices, thorough and complete coordination was of utmost importance. This coordination was not forthcoming, however, under the 9 March organization. The Materiel Command procured anything that was asked by the A-sections, the Military Requirements and Technical Services Directorates, and the Technical Training, Flying Training, Ferrying, and Air Service Commands, with no one charged with coordination.13 Not only was there overlapping of staff and directorate functions, but it was difficult to determine the division of responsibility among the directorates.14 The directorates not only became planning agencies as well as operating agencies, but they frequently dealt with minutiae which should not have been within their province. 15

Comments from the field evidenced that the AAF Headquarters organization was not functioning as it should—as a planning and policymaking agency. Headquarters of the First Air Force attributed 25 instances of misinformation, conflicts of orders, and confusing action to Headquarters, AAF.16 The commanding general of the Technical Training Command complained that the creation of the directorates served to defeat the decentralization policy, because the directorates attempted to operate the field activities too much in detail and originated too many field inspections. He also noted the "everlasting desire grown up through long years of peacetime operations, for any organization in Washington to take unto itself all the executive and operating powers possible."17

The Inspector General's Department had a slightly different approach to the problem. On 2 July 1942 Col. B. M. McFayden submitted a report on the working of the 9 March organization.18 He suggested first of all that by confining itself rigorously to broad policy and planning the staff had "over-delimited itself, thereby relinquishing in some degree the functions of rendering staff decisions and supervision to insure coordination among the operating directorates." As a result, coordination had been established among the directorates in lateral operation, thus weakening vertical control. This could be alleviated by emphasizing that the functions of the staff included the "active enunciation of policies and objectives to the appropriate operative directorates."

Colonel McFayden then stated what he considered to be the major duplications and suggested remedial action. He noted that there were three planning agencies: Plans Division of the A-staff, Program Planning and Control, and Organizational Planning. The second of these appeared to overlap the functions of several of the A-staff divisions. The title "Directorate of Military Requirements" was a misnomer since Program Planning had been removed from its jurisdiction. The directorates of Individual Training, Air Defense, Ground-Air Support, Bombardment, and War Organization and Movement should all be viewed as operating agencies for A-3. The Directorate of Base Services should be the operating agency to execute plans formulated by A-4.

Communications, Weather, and Photography appeared to be suitably grouped in the Directorate of Technical Services. However, Flying Safety and Technical Inspection Colonel McFayden viewed as more closely associated with the Air Inspector, and he thought that their correlation with that office might be "advantageous in the conduct of field inspection." Also, he felt that the Directorate of Legislative Planning should be combined with the Air Judge Advocate's office, the Budget with the Fiscal office, and the Directorate of Organizational Planning with Management Control. The exact needs of the staff in statistical matters should be determined, and these needs should then be met by Statistical Control, not by some other agency. He recommended that the number of Headquarters offices authorized to issue orders and instructions in the name of the commanding general be reduced from the "more than thirty." The chart

of the proposed organization revealed that the Directorate of Personnel was to be consolidated with A-1.<sup>19</sup>

Colonel McFayden's comments were carefully considered, and on 9 July the Director of Management Control proposed that the functions performed by the various A-staffs be consolidated with all similar functions performed in the operating echelons. This would consolidate A-1 and the Directorate of Personnel; A-2 and the Intelligence Service; and A-3 with the Military Director of Civil Aviation, the Directorate of Military Requirements, and the Directorate of Technical Services (less Flying Safety and Technical Inspection). A-4 would continue as then constituted. Plans would be reorganized to include Program Planning and would be attached to the office of the Chief of Air Staff. Management Control would have under its supervision the Air Inspector, the office of Administrative Inspection, the Directorate of Flying Safety, Technical Inspection, and the Budget and Fiscal office. The Air Adjutant General would be removed from Management Control and his duties redefined to conform to the conventional duties of an adjutant of any command. The proposal for the elimination of the directorates was justified as follows:

Experience has proved conclusively that while dealing in shortages of both personnel and materiel . . . the organizational need for a policy echelon and the need for an operating echelon within the same organization to execute such policies is more theoretical than practical. Under stated conditions day-to-day policy and even long-range policy cannot be formulated with any acceptable degree of accuracy without complete comprehension of operating capacity and of what effect even a slight change in policy might have upon operating schedules . . . the officer responsible for day-to-day and future policy should likewise be responsible for accomplishing desired results from an operating standpoint. . . . The consolidation of these two functional levels will eliminate one organizational layer which now requires time-consuming coordination, results in divided responsibility, and often results in contradictory directives to lower echelons of command.20

This proposal, which was not approved, would have established an organization similar in general outline to the one finally adopted on 29 March 1943.

In a meeting of 4 August 1942 to consider a reorganization, many of the June comments were repeated and others were added; there were too many people to coordinate with; expeditious fol-

low-up was not permitted; planning functions were not divorced from operating functions; too much decentralization had occurred; the type directors were *expert administrators* rather than *experts*.<sup>21</sup>

It was decided at this meeting that the organization was in the main satisfactory,22 but some reshifting of offices did occur on 9 September. On that date Management Control and Program Planning were given policy staff status, and the Director of Flying Safety, the Budget and Fiscal Officer, the Air Surgeon, the Air Judge Advocate, and the Air Inspector were constituted into what became known as the Special Staff.23 In this shifting the Directorate of Technical Inspection was changed to a division of the Air Inspector's office, and the Public Relations office was eliminated. The office of Military Director of Civil Aviation also was abolished and its functions transferred to the Directorate of War Organization and Movement and to the Air Transport Command. No changes were effected in the Directorate of Military Requirements other than the additional duties just noted; Technical Services, however, was relieved of the directorates which did not logically belong under it.

Other slight changes occurred between March 1942 and March 1943. On 1 January the Directorate of Air Traffic and Safety was given the responsibility of coordinating the activities of the directorates of Flight Control, Flying Safety, and Safety Education. All functions of the Military Air Traffic Control Division of the previously abolished Military Director of Civil Aviation were transferred from War Organization and Movement to the Director of Flight Control.<sup>24</sup>

By 1943 the dissatisfaction with the 1942 organization had begun to crystallize. Duplication of authority and responsibilities naturally led to a certain irresponsibility and created jealousies among the directorates, staffs, and commands; then, too, disparity between rank and authority caused considerable dissatisfaction. However, at a "dramatic" meeting with the Assistant Secretary of War for Air in General Arnold's office, in September 1942, it was decided that no major shift should be made at that time.25 Nevertheless, an awareness of the need for change continued to exist, and a study by Organizational Planning was communicated to the Commanding General, AAF on 5 February 1943. This would have effected a consolidation of activities similar to the ones proposed by the Inspector General's Department and some of the comments of June 1942.<sup>26</sup> One plan had already been approved by the Chief of Air Staff, when General Arnold, returning from his world tour, brought back additional organizational ideas. The result was an adjustment and reconcil, tion of the various plans and ideas that had been or were soon to be presented.

The streamlining which became effective on 29 March 1943 telescoped into the offices of the assistant chiefs of staff and special staff many offices devoted to the planning or execution of specific functions, abolished much of the overlapping of functions, and reassigned other offices.\* The assistant chiefs of staff were reduced to six: Personnel; Intelligence; Training; Materiel, Maintenance, and Distribution (MM&D); Operations, Commitments, and Requirements (OC&R); and Plans. Program Planning became a part of OC&R. Management Control was attached directly to the Office of the Chief of Air Staff. To give adequate consideration to manpower problems, a Manpower Division was established in Management Control, and Legislative Planning was removed to the jurisdiction of the Air Judge Advocate. The Special Staff was increased to five by the creation of the Special Projects office. The deputy chiefs of air staff were increased to three.

The directorates were abolished because they were considered an unnecessary link in the chain of command and authority, and their functions were absorbed by the various assistant chiefs of air staff and the commands.27 Air Defense, Bombardment, Air Support, and War Organization and Movement became a part of OC&R.28 Base Services (minus the Air Chaplain) went to MM&D; Individual Training, to Training; Flight Control, Flying Safety, and Safety Education formed the newly organized Flight Control Command. The Directorate of Personnel and the Air Chaplain became part of Personnel. The directorates of Weather and Communications were split among the Flight Control Command, Training, OC&R, and MM&D; and Photography was divided among Training, OC&R, and MM&D. Two sections of Counter-Intelligence, Safeguarding of Military Information and Training Clearance, were transferred to the Facilities Security and Personnel Security Branches of the newly created Air Provost Marshal in MM&D. The Message and Cable Division was relegated from a major component of Management Control to a branch of the Air Adjutant General's office.

The training functions of the various directorates, except those which went to MM&D from Base Services, were taken over by Training; similarly, procurement functions were absorbed by MM&D. "Primary interest, supervision, and administrative channels of communication" between the field arms and Assistant Chiefs of Air Staff were established as follows: Flying Training, Technical Training, and Troop Carrier Commands, and First, Second, Third, and Fourth Air Forces to Training; Air Transport, Air Service, and Materiel Commands to MM&D; Proving Ground, Antisubmarine, and Flight Control Commands, School of Applied Tactics, and the other 10 air forces to OC&R.

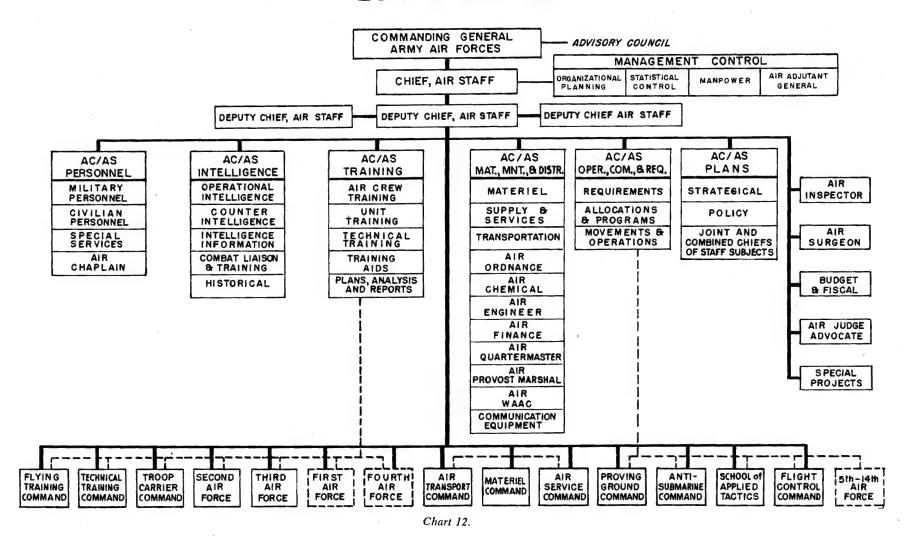
This grouping definitely reduced the span of control in AAF Headquarters and built an organization along functional lines. Under this structure Headquarters was to determine the programs and policies that would be executed but would not tell the field how to carry them out. General Arnold stated that decentralization must occur, that the staff "must stop operating" and spend its time thinking "in order that we can correctly tell our commanders what to do and maybe sometimes when to do it," but never how to do it.<sup>29</sup> Although this view was applicable to Plans, it seems evident that the transfer of the operating directorates to the new staff offices precluded the possibility of the staff confining itself to policy alone.

The attempt to separate policy and operations at the staff level had not been successful. The concept had merits, not the least of which was rapidity of functioning, but it was abandoned because the disadvantages seemed to outweigh the advantages. Should an agency be established to supplement and coordinate the planning of this A-staff, then the effect of operating being done in this staff might be partially offset.

From March 1943 to the end of the year no internal changes of major significance occurred. Minor shifts included the transfer of the Message and Cable and Administrative Divisions of the Air Adjutant General's office to the newly created Administrative Services Division of Management Control;<sup>30</sup> the shifting to Training of Headquarters jurisdiction over training of arms and services units previously delegated to MM&D;<sup>31</sup> the creation for

<sup>\*</sup>See Chart 12, p. 44.

# ARMY AIR FORCES ORGANIZATION 29 MARCH 1943



glider activities of a Special Staff office which was subsequently discontinued and its duties lodged in OC&R; the creation of the Weather Division in OC&R to combine the personnel and activities of the Weather Branch, the Weather Information Branch, and the Air Weather officer;<sup>32</sup> and the elevation of Operations Analysis to division status in Management Control.

Three new Special Staff offices, Flying Safety, Communications, and Antiaircraft, appeared on the October 1943 master organization chart. The first office had been elevated to a comparable position for a short time in the summer of 1942, but under the new organization it was the Head-quarters agency for the Office of Flying Safety, which was located at Winston-Salem, N.C. The Communications Officer was given many of the functions formerly performed by the Director of Communications and more recently by sections in the Flight Control Command, OC&R, and

MM&D.<sup>33</sup> The Antiaircraft Officer was to be a special assistant to the Commanding General, AAF, and was to represent that official on all antiaircraft matters affecting the AAF. In December 1943 the Office of Legislative Services was established on the Special Staff to perform the legislative activities previously lodged in the office of the Air Judge Advocate and to serve as a liaison agency with Congress.<sup>34</sup>

A noticeable trend in AAF organization during 1943 was toward the great increase in Special Staff offices in AAF Headquarters. Some activities, such as communications, safety, and weather were still the subject of discussion, and it was obvious that functions would continue to shift. But, on the whole, by the end of the year the principle of consolidating policy and of monitoring operations in a single set of offices and dispersing operating functions to the field was fairly well established and working in a satisfactory manner.

## Development of Management Control and Program Planning Agencies

#### **Management Control**

DURING WORLD WAR II the Army Air Forces was one of the most essential parts of the greatest business in which this nation ever engaged. One of the most vital factors in the conduct of any business is the proper untilization of control devices. The establishment of the Directorate of Management Control in March 1942 represented for the first time the conscious application of modern business methods to the functioning of a large military organization. Although all control functions were not lodged in this new office, the means of management control were much stronger than ever before.

One function over which Management Control was not given jurisdiction was inspection, which had the longest history of any of the means of management control in the air arm. An Inspection Division had been re-established in the OCAC in 1927\* and was originally concerned almost exclusively with technical inspection. However, the importance of management sections in industry did not go unheeded; in 1928 two units of the Inspection Division were performing functions similar to those of the industrial agencies. The Development Section studied organization data and made reports that enabled the Executive to base his policies and decisions on facts rather than on opinions and estimates. The administrative officer made recommendations for coordinating the efforts of the executive staff and other elements of the organization.1 In 1936 the Inspection Divi-

\*There had been an inspection service in the Air Service as organized in 1919, but shortage of personnel and funds, "the interference with the Inspector General's Department, and its dabbling into the affairs . . . pertaining to other divisions" caused its discontinuance.

sion was made a section of the Supply Division.2

The expansion program greatly increased management work in the air arm. This increase was especially noticeable in procedural analyses, revisions of forms, and related activities. Consequently, the Administrative Research and Statistics Section was established in the Miscellaneous (later Administrative) Division to take over the functions of the Development Section. The increased importance of the inspection function was reflected in the assigning of Brig. Gen. H. A. Dargue as its chief in November 1940. Naturally, all phases of inspection later underwent considerable expansion, but by the end of 1943 none had yet been brought under the jurisdiction of Management Control.<sup>3</sup>

Means of management control were, then, more or less haphazard and fairly nebulous prior to 1941. The Administrative Research and Statistics Section had not developed to the point of adequately supplying accurate information for planning purposes. The Plans Division had been given the responsibility for making organizational surveys which were, in the main, rather superficial. In the spring of 1941 the Organization Control and Administrative Unit of the Operations Section of the Plans Division was charged with the maintenance of reference data on Air Corps and GHQ Air Force units with respect to personnel, aircraft, locations, and equipment, and the conduct of studies to improve Air Corps organization, administration, and control policies.4 It would have been difficult for this unit, buried in the echelon of command as it was, to have exercised effective controls;5 furthermore, plans had many other activities on which it was deemed more important to utilize the limited personnel.

The imminence of war accentuated the imperative need for accurate and up-to-date information on the combat readiness of tactical units, including the number of personnel and the status of training, aircraft, and equipment. In an effort to supply this need a Statistics Section—a part of the former Plans Division—was established in the office of the Chief of Air Staff after the 20 June 1941 reorganization. The Administrative Research and Statistics Section remained in existence; its chief had reported one month before that there was need for a study of all reporting systems and reporting forms and of the statistical needs and requirements of the Air Corps as a whole, and for the development of a standard practice or precedural manual.6 The creation of the Air Staff Statistics Section did not, however, solve the problem. Instead, it made it more acute. There was also such a unit in the Air Force Combat Command with the result that there were three sets of statistics on vital items. and no two were in agreement. Each of the agencies felt that its own figures were the ones that should receive official sanction.7

A portion of the Plans Division was retained as the Plans Section in the OCAC in June 1941. The line of descent from this section to Management Control was direct. When the OCAC was reorganized in December 1941, the Plans Section was divided into two branches under assistant executives, one for technical and one for administrative planning and coordination. The former office never developed very clear functions. The latter, however, included the Administrative Research and Statistics Section and was to "plan and coordinate all administrative functions of the Office, Chief of the Air Corps."

Col. B. E. Gates, former head of the Plans Section, served as Assistant Executive for Administrative Planning and Coordination. Stating its role clearly for the first time, he placed strong emphasis on organizational and procedural planning. He stressed the importance of the investigation of administrative methods, the instigation of improved procedures, and the supervision of the preparation of administrative manuals.<sup>9</sup> To assist him in the new activities, Colonel Gates acquired a group of civilian administrative analysts.<sup>10</sup> This broad interpretation of responsibilities did not go unchallenged; the Adjutant General, OCAC protested that his functions were being usurped.<sup>11</sup>

The Wallace Clark study of October and

November 1941 had pointed out the need for better statistical reporting, the need of civilian administrators, the desirability of adopting business methods, the necessity of standardizing procedures, 12 and the desirability of time objectives and time-quantity reports. Somewhat earlier in 1941 General Dargue had proposed a Management Engineering Staff for the Army Air Forces, and the head of the Administrative Research and Statistics Section expressed approval of most of the proposal. 13

One other step of importance that occurred prior to 9 March 1942 was the placing of the responsibility for coordinating and issuing directives concerning Air Corps organization and procedures in a Procedures Section under the Assistant Executive.<sup>14</sup> Formerly such coordination had been accomplished by circulating these directives among the interested divisions, with the originating division bearing the responsibility for coordination. This action was protested by the Adjutant General, OCAC, but the authority of that officer was even more uncertain than the powers of the OCAC as a whole.

In the course of their reorganization study, the consultant staff pointed out two major problem fields in the sphere of management control. These were the need for civilian administrators and the need for regulating partial reorganizations. The first recommendation perhaps was not considered per se but by the nature of circumstances received considerable corollary attention. The control for regulating partial and ill-considered reorganizations was provided by the creation of the Directorate of Organizational Planning in the March 1942 reorganization.

At the same time the activities performed by Colonel Gates and his consultant group, as well as other functions, were consolidated in the Directorate of Management Control. The director was charged with the supervision and coordination of the work of the directorates of Organizational Planning, Statistical Control, and Legislative Planning, and the work of the Air Adjutant General. From the control standpoint the most important of these were Organizational Planning and Statistical Control. The former was, among other things, to conduct studies and surveys of "administrative problems relating to the organization, flow of work, procedure, and management practices in the Army Air Forces; develop improved plans

of organization and procedure and assist in their installation"; to "review and advise upon all proposed changes in organization and procedures which affect the operation of other than the originating subdivisions," and to coordinate and issue administrative directives.15 Statistical Control was to conduct continuous studies of AAF statistical requirements and to devise methods for meeting these requirements; to develop and maintain a statistical system for scheduling and reporting in summary form on personnel recruitment and training, and materiel production; and to coordinate all machine tabulation installations in the AAF.16 This directorate combined the statistical facilities formerly of the Air Staff, Air Corps, and Air Force Combat Command, thus centralizing the responsibility for this vital information. The Budget office was recognized as a related management tool, but it was not considered feasible to group it with the new directorate.17

There was little objection raised to the functioning of the new directorate when comments on the organization were made in June 1942. The Air Adjutant General objected, however, to lodging the authority for issuance of directives with Organizational Planning, and various individuals noted that the statements of functions of some of the offices were still ill-defined. Because the Management Control directorate had been in existence for such a short period, this latter condition can perhaps be partially overlooked as a criticism of that agency.

In July 1942 the Director of Management Control recommended that all activities necessary to control functions be assigned to an Assistant Chief of Air Staff, Management Control. These were to include, in addition to the four subdirectorates, the offices of the Air Inspector, Administrative Inspection, Director of Flying Safety, Technical Inspection, and the Budget and Fiscal Officer. 18 He also recommended that the Air Adjutant General be removed from the jurisdiction of Management Control and be made to conform to the conventional duties of the adjutant of any command. Such a consolidation of offices was not approved, but by the September 1943 reorganization Management Control was elevated to the level of an Assistant Chief of Air Staff office. In this new position Management Control could better execute its control functions than as an operating directorate. The increasing significance of this agency was

recognized by the March 1943 reorganization when it was attached to the office of the Chief of Air Staff. In this shift, the legislative planning functions were removed to the Air Judge Advocate, while the Manpower Division, established earlier in Management Control, was charged with responsibility for survey of the personnel policies and allotments of the various AAF agencies. Its problems were to reduce the number of the various personnel agencies that overlapped each other, to suggest a realignment of duties, and to effect an economical and efficient utilization of manpower.

On 18 August 1943 the Administrative Services Branch of Organizational Planning was raised to division status in Management Control and was given many of the functions which had been performed by the Air Adjutant General.<sup>19</sup> By the October reorganization, the Operations Analysis Division was created and was to be the AAF Head-quarters agency through which the combat analysis groups in the theaters of operations would function. Some control functions, such as inspection and budgetary and fiscal controls, properly remained outside the jurisdiction of Management Control.

Management Control continued with its 1943 organization until the summer of 1945, when the subordinate offices began to be removed from its jurisdiction.<sup>20</sup> In the fall of 1944 a rather sweeping reorganization of AAF Headquarters was contemplated.\* By this change Organizational Planning (less a few functions) was to be transferred to a newly created office of Assistant Chief of Air Staff, Organization, Training, and Requirements. Management Control was to be eliminated. General Gates,† Chief, Management Control, agreed with the proposal to eliminate "Management Control" as such because the term "management" was not appropriate to a military organization and "control" was likely to be "resented, misunderstood, or otherwise regarded in a bad light, thereby hampering the agency in the performance of its mission. He insisted, however, that those functions calling for administrative guides or managerial aids which affected all staff offices should be centrally directed by the Chief of Air Staff or his immediate office. To this end, he suggested that a Deputy Chief of Air Staff should supervise the management agency's tools including adminis-

<sup>\*</sup>See below, p. 61.

<sup>†</sup>Gates became a brigadier general 25 June 1943.

trative planning, statistical control, program control, manpower, operations analysis, and administrative services. In opposing dissolution of the management agency, Gates called attention to the fact that the Bureau of the Budget had played a significant role in setting it up in March 1942.<sup>21</sup>

On 25 November Gates wrote that the principle of the reorganization should be approved and that the wisdom of combining the training, organization, and requirements functions in the Air Staff was unquestionable. He felt, however, that such a realignment should be postponed until the delineation of responsibilities between Headquarters, AAF and the proposed Continental Air Forces had been clearly drawn.<sup>22</sup>

The reorganization proposed in late 1944 failed to materialize, and Management Control continued to function intact until after the capitulation of Germany. Attention then began to focus on the realignment of Headquarters, AAF for the postwar period. In the latter part of June 1945 the reassignment of the components of Management Control to other offices began. On 27 June the Statistical Control Division was transferred to the Office of the Secretary of Air Staff, and the following day the Administrative Services Division (less the supply function) and the Publications Branch were transferred to the Air Adjutant General's Office.23 The Manpower Division was transferred to AC/AS, Personnel on 1 July; Organizational Planning personnel were distributed to various Headquarters offices in July when the functions formerly charged to Organizational Planning were made the responsibility "of each major office of Headquarters AAF in its own sphere of operations"; and Operations Analysis was transferred to AC/AS-3 on 25 August. With this last action, Management Control—left with neither functions nor personnel-ceased to exist.24

Thus after almost three and one-half years, the central agency for the supervision of the administrative guides and managerial aids affecting all staff agencies was dissolved. The office had grown gradually in the few years prior to 1942, but, with the support of the Bureau of the Budget, had flowered in the March 1942 reorganization.<sup>25</sup> Considerable difference of opinion seemed to exist as to the merits of having such an office, but that it made worthwhile contributions appears to be unquestionable. In its growth from March 1942 to the end of 1943, the accretion of functions

pulled it away from the original purpose and intent of providing better administrative management for the AAF. The provision of administrative services for Headquarters, AAF, to mention one example, seems not to have been within the proper sphere and purview of the office. Such an arrangement gave to one division of the office a major responsibility of surveying the functions of another division of the same office. Had the office been confined more closely to survey and planning and less concerned with actual operations, it might better have achieved its aim and longer survived the accumulative disapprobation. As General Gates intimated in the fall of 1944, perhaps both "management" and "control" were unfortunate terms to be applied to such an agency in the military sphere.\*

Thus, a partial explanation for the termination of Management Control may be found in misconceptions of the agency's proper functions caused by failure to modify a terminology unsuited to a military organization. In retrospect, objections to the office seem minor when compared to the advantages derived from its activities.

#### **Program Planning and Control**

One of the most vital components of adequate planning in any structure is the program planning and control function. This activity in the Army Air Forces included the establishment of a schedule of all requirements—airplanes, engines, personnel, training, quartermaster, communications, medical, etc.—and a synchronization of the flow of the various components. It apparently received no real consideration, however, until the Wallace Clark study late in 1941.

The Clark study noted that there was much to be desired in planning and that the various programs were not coordinated one with the other. Maj. Gen. W. R. Weaver, Acting Chief of the Air Corps, recognized late in 1941 the necessity of collecting in one location all possible information pertaining to programming and directed that such data in graph or chart form be placed on the walls of his office.<sup>26</sup> Already, however, some of the administrative consultants of the Bureau of the Budget were working on the coordination of programming activities. Various offices were visited and their programs requested; some were able to produce

<sup>\*</sup>See above, p. 48.

charts only, many of which proved to be misleading. The programs obtained were used in a study which revealed the glaring inconsistencies and lack of reconciliation between availability and requirements.27 The group working on program planning was increased in membership. Early in February 1942 it stated its objective as "the development of an overall system of coordinated records and reporting schedules with graph charts as to type, quantity, and time elements covering the components of the Air Force."28 The Bureau of the Budget reported the following salient shortcomings: the lack of a central assembly or correlation of information on resources and requirements; the reliance upon the individual estimate of the resources and requirements based on the "best available information" by the respective arms and services; the absence of a periodic evaluation of information on resources to meet requirements; the basing of recommendations concerning programs and policies on "individual experiences and exigencies . . . not related to other components." The result was uncoordinated planning and programming.29

By the time of the major reorganization of 9 March 1942 the recognition of the need for a program agency was gaining adherents. During the discussion preceding this organization, responsibility for program scheduling and control was conceived as having two phases: "First, the policy decisions establishing the various schedules and controlling their adjustment; second, the provision of statistical information upon which the decisions would be based. The first of these responsibilities was left in the Air Policy Staff as its main job; the second was left to the Director of Statistical Control."

The consultant group was reduced in size after the 9 March reorganization, but the remaining staff was able to expend more time on the development of program planning.<sup>31</sup> Realizing that scheduling and programming were the very heart of the supervisory task of a procurement and training agency such as the Army Air Forces, the consultant group began an intensive study of this function. It soon became evident that the policy staff was concerning itself with combat activities and was not inclined to exercise the desired authority in control matters. Plans, although intended to correlate the preliminary work of A-1, A-3, and A-4, gave no thought to the matter and was not organized or staffed for

such a job. No staff leadership was exerted to improve the scheduling work of the various directorates which frequently had only the most general "forecasts" of their work. "Further, and consequently, there was confusion in many fields as to whether responsibility for scheduling lay in head-quarters or in the commands, and to what extent. For example, did a command, when given a job to do, calculate its own requirements or was that calculation made by the headquarters unit which determined the size of the job?"<sup>32</sup>

As the new organization proceeded into the three-month test period, and the study of the consultants continued, it became increasingly clear that the responsibility for the programming must be centralized and placed on a sufficiently high echelon to ensure coordination and control. The need for such an agency was further accentuated by the complaint of the Operations Division (OPD), General Staff, that it did not know where to go to get information from the Army Air Forces.

The result was the establishment—primarily through the efforts of the Bureau of the Budget and Management Control-of a Program Planning and Control Unit in the office of the Chief of Air Staff. This unit was charged with assisting the Chief of Air Staff in determining the nature and scope of schedule information to be prepared in the various directorates and commands, providing the basic information which those offices needed, supervising the interrelationship and adjustment of their schedules, and most important, perhaps, synchronizing the program by the development of a progress reporting system to indicate whether the approved schedules were being met. To obviate duplication, responsibility for detailed scheduling was to be delegated to the greatest possible degree to the directorates and commands.38 Almost immediately some of the staff divisions, especially A-3, protested the broad authority of the new agency as usurping the traditional prerogatives of those offices. Consequently, the authority of the office was drastically curtailed by AAF Regulation 20-10 of 30 June 1942. The new regulation said nothing of the control function and was very brief regarding responsibilities for coordination of the programs. The chief of the unit was merely to assist the Chief of Air Staff in the fulfillment of his functions.

The Chief of the Program Planning Unit operated in the office of the Chief of Air Staff until

September, when he became Assistant Chief of Air Staff, Program Planning. In spite of the importance of the programming activity, full cooperation of the other Assistant Chiefs of Air Staff was never secured, and Program Planning never got far beyond the unit's program. This absorption in minor details might have been avoided if the manifold operating activities previously performed by the Air Force Combat Command had been lodged with an operational training command rather than with the Directorate of Military Requirements.<sup>34</sup>

On 9 July 1942 and again on 5 February 1943 Management Control proposed that the programming functions be placed with the Assistant Chief of Air Staff, Plans;35 but when the major regrouping of functions occurred on 29 March 1943, Program Planning was reduced to branch status in the Alocations and Programs Division of OC&R. This reduction in echelon obviously did not contribute to the effectiveness of the unit. After March 1943 several proposals were made regarding the organizational position of the program agency. One suggestion was to make the program function the responsibility of a programs branch of Management Control.<sup>36</sup> Management Control proposed placing the program responsibilities on a Deputy Chief of Air Staff, while the Bureau of the Budget wanted to establish a program coordinator in the office of the Chief of Air Staff.<sup>87</sup> Several similar proposals failed of adoption.

In the summer of 1943 General Arnold delegated to Brig. Gen. L. S. Kuter, Assistant Chief of Air Staff, Plans, the controlling influence over program planning. Several meetings were held in an attempt to implement General Kuter's assumption of this control. The proposed solution of Management Control was to incorporate the program function into the Plans office and to make the head of that office a Deputy Chief of Air Staff, giving to the Program Control Division responsibilities similar to those first allocated in June 1942.38 No proposal to reelevate the programming control functions to a sufficiently high echelon<sup>39</sup> had been successful by the close of the year. With the October 1943 reorganization, however, the chief of this activity had been raised from a divisionhead status to Deputy for Program Control in OC&R.

Two months later, Edmund P. Learned, who had been serving as Deputy for Program Control, was appointed Special Consultant to the Com-

manding General, AAF. He reported through the Office of the Assistant Chief of Air Staff, OC&R, where he was assigned as Advisor for Program Control. In this position he was continuously to review and to recommend action necessary for over-all control of the program and to ensure a coordinated flow of aircraft, equipment, and trained personnel to meet commitments. Among other means of accomplishing these ends, he was to ascertain relative priorities, make recommendations for the reconciliation of conflicts, and maintain records and prepare reports reflecting the program status.40 By the end of 1943 many conflicts in the AAF program had been resolved, and the information and devices of Statistical Control proved very beneficial in making modifications of the program.

However, serious difficulties remained. In May 1944 Learned expressed dissatisfaction with the personnel program planning, and pointed out that Training and Personnel were not operating as smoothly as they should in planning the training program. This expression of dissatisfaction led to a suggestion that Management Control examine the AAF Headquarters organization with respect to program planning and recommend an organization or method of procedure which would require a "central program planning agency to coordinate and recommend action on all basic production programs, both personnel and materiel." The several divisions would remain responsible for devising their own programs to provide necessary auxiliaries or components.41

Maj. Gen. H. A. Craig, the Assistant Chief of Air Staff, OC&R maintained that a strong, centralized program agency already existed and recommended that Organizational Planning and the Advisor for Program Control review pertinent regulations and memorandums and recommend revisions necessary to ensure the proper coordination. The Chief of Air Staff, Maj. Gen. B. M. Giles, approved this proposal.<sup>42</sup>

Only slight modifications resulted, and the office continued under the Assistant Chief of Air Staff, OC&R until the 23 August 1945 reorganization. At that time program control activities were removed from the assistant-chief-of-air-staff level and placed in the Office of Program Monitoring. The latter office reported directly to the Chief of Air Staff, although it was attached to the office of the Secretary of Air Staff for administration and

coordination.43 The functions of the office were not full restated until 12 September 1945.44 Under the new statement of responsibilities and functions, the office was to maintain surveillance over and recommend appropriate action concerning all AAF programs. It was to undertake a constant study of the implications, status, and programmed relationships of resources, requirements, allocations, authorizations, and commitments in connection with the procurement, availability, production, training, flow, storage, separation, or disposition of personnel, crews, units, aircraft, equipment, supply, and facilities. In effecting this, the office was to develop ground rules, review proposals, monitor reconciliation of conflicts, review requests for change, and recommend action to balance the program.\*

Thus, only after the cessation of combat did the program office return to the echelon on which it was originally established in June 1942. In the intervening period the office was never the control

agency it was intended to be, nor could it easily have become such so long as it was a portion of the office of an assistant chief of air staff. It could not effect control when it was on the same, and usually lower, echelon as the offices whose programs it was intended to control. The fortunes of war may make a program of fleeting value, but they cannot alter the importance and the necessity of the synchronization of the various factors so long as the program remains in effect. Fixed or standardized methods and means of arriving at a new program when the occasion demands are almost as important as the program itself. Statistical Control assumed an increasingly large role in this phase of programming, and it materially assisted the agency charged with keeping the program in balance. In a little more than three years there were many proposals for the location of this balancing responsibility, and several were tried. The important consideration regarding the August-September 1945 change is that the office was placed on an echelon high enough to ensure its exercise of real control authority.

<sup>\*</sup>These are only some of the more important procedures and functions; there were many others.

#### **Acquisition of New Functions**

FFICIENT FUNCTIONALIZATION of the L AAF agencies was a major effort of Management Control. This functionalization embraced not only the assignment of duties to the organization best able to accomplish a given mission, but also involved the acquisition and appropriate reassignment of new services that would make the AAF as nearly as practicable a self-impelled, selfsufficient agency. Significant responsibilities with which the AAF was charged in the closing period of the war were in the fields of communications and aircraft crash rescue and fire fighting. The AAF's quest for control of functions relating to weather equipment had been practically successful by the end of the conflict, but the responsibility for antiaircraft artillery remained an open question.

The transfer from the Army Service Forces (ASF) to the AAF of responsibility for research, development, maintenance, issue, and storage of communications equipment peculiar to the AAF was an important step in the absorption of duties which would make the AAF a self-contained unit. The move indicated that electronic equipment was now recognized as an integral part of aerial operations; thus, supervision of such equipment logically belonged to air personnel.

The impulse for the AAF to acquire these duties seems to have had its origin in storage problems and the difficulties attendant upon getting surplus equipment back into ASF channels from the AAF. The storage problems were made apparent by a strong complaint of the Air Communications Office on 26 June 1944. Almost a month later an AC/AS, OC&R memo pointed out the causes of some of the difficulties. It asserted that OC&R desired to be in a position to state the requirement

for necessary items and to have one agency coordinate the procurement, receipt, storage, and delivery of the equipment. "This Office," it declared, "cannot act as a coordinating agency between two or more procurement offices." The Air Communications Office pointed out on 9 August that changes in Air Staff procedures would be only temporary palliatives; the more fundamental difficulties lay in the division between the AAF and ASF of basic responsibility for the development and procurement of technical equipment. Because the decision to change the basic responsibility had been made, it suggested that the AAF procedures be retained for the time being.<sup>2</sup>

This decision had been set forth by General Marshall on 26 July in a memorandum addressed jointly to Generals Arnold and Somervell. He stated that after discussing the problem with Dr. Edward L. Bowles, expert consultant to the Secretary of War and communications consultant to the Commanding General, AAF, he believed airborne radar and radio equipment, guided missiles, and ground radar and radio navigational aids should be considered items of equipment peculiar to the AAF and should be treated as a part of the main problems of aircraft design and operation rather than as accessories. General Marshall felt, however, the time was not propitious to transfer all production activities of these items to the AAF but that the AAF should assume responsibility for research, development, and development procurement. A survey by Bowles indicated such a transfer would involve about 195 officers, 170 enlisted men, 1,470 civilians, and approximately \$50,000,-000 in facilities. The Deputy Chief of Staff would take the necessary staff action.3

General Arnold felt the new responsibility would bring greater efficiency to AAF operations. He recommended that the transfer of functions, funds, personnel, and facilities be accomplished in an orderly manner that would not interfere with current work assignments.4 On 26 August the Deputy Chief of Staff issued a directive providing for the transfer of the designated responsibilities and laid down the basic rules for the change. The commanding generals of the AAF and ASF were to name members to a board to work out the details for the transfer of functions connected with almost 600 items of equipment; the Signal Corps was to terminate its contracts in this field as rapidly as practicable: the AAF was to make no new contracts for radio and radar peculiar to the AAF (except those necessary for experimental development) until the defeat of Germany; and the transfer of funds, facilities, and personnel was to be gradual, with the AAF assuming full responsibility about the time hostilities in Europe ceased.5

The board, composed of three ASF and three AAF members under the chairmanship of Maj. Gen R. L. Maxwell, Assistant Chief of Staff, G-4, was appointed on 31 August.<sup>6</sup> Agreements were quickly reached on certain details of the transfer and some reallocation of responsibility took place as early as 15 October. The transfer of research and development functions was completed by 31 January 1945; the other functions were handed over about 15 April, but all the details were not finally arranged until after the collapse of Japan.<sup>7</sup>

By the assumption of full responsibility for the radio and radar equipment it needed, the AAF moved one step closer toward full control over the materials necessary for the conduct of aerial warfare, became better functionalized, and eliminated some of the complicated channels that had previously existed in the acquisition of the essentials of modern aircraft.

The problem faced by the AAF concerning responsibility for meteorological equipment was similar to that relative to communications. Since 1 July 1937 the air arm had been charged with many weather functions, and by early 1943 had been given control of all weather service for the AAF.<sup>8</sup> On 19 May 1945 the AAF Weather Service was designated as the agency to provide weather service for all components of the Army except those specifically exempted by the War Department.<sup>9</sup> The Signal Corps, however, retained

the responsibility for development, procurement, and maintenance of meteorological equipment.

In January 1945 OC&R recommended that these Signal Corps responsibilities be transferred to the AAF, but because of the extensive and comparatively urgent duties which the AAF was assuming in communications activities, it was recommended that consideration of this proposal be deferred for four or five months.10 There was general agreement that the transfer should eventually be made, and on 14 May OC&R repeated its recommendation, which was referred to the divisions of Materiel and Services (M&S) and to the Air Technical Service Command (ATSC) for comment.11 ATSC replied that the functions could be progressively assumed on 15 August and 15 November if the transfer were authorized by 15 June. It recommended, however, that all activities be taken over simultaneously two months from the date of the War Department order directing the transfer.12

No division of M&S expressed opposition to the transfer, but Brig. Gen. T. C. Rives (who had wide experience with the communications transfer) felt that the many unsettled problems of the earlier transfer justified deferring the assumption of responsibilities regarding meteorological equipment.13 Maj. Gen. E. M. Powers decided, however, to proceed with the preparation of a staff study proposing the transfer, and on 10 July a meeting was held to discuss the proposal.14 In discussion it was brought out that about 94 percent of the approximately one hundred items of meteorological equipment were utilized solely by the AAF, the AAF used approximately 97 percent of the dollar value of all meteorological equipment, the AAF had 1,731 weather stations as contrasted with 290 for the Army Ground Forces, and that since 19 May the AAF had been charged with the provision of weather service for the whole Army. The staff study was then undertaken and on 17 September was transmitted to the War Department General Staff.15

The study pointed out the distribution and use of meteorological equipment, noting particularly that there were only eight items that were used predominantly or exclusively by the other major components of the War Department. The AAF furnished the information upon which quantitative requirements were computed and established military characteristics for the development of equip-

ment for the AAF. Furthermore, when the Air Corps acquired its weather functions in 1937, the Chief Signal Officer had recommended that the Air Corps assume within a reasonable length of time the responsibility for development, procurement, storage, and issue of meteorological equipment and supplies. The AAF maintained that the assumption of these responsibilities (plus maintenance) would be justified on the following grounds: 1) it would unify, simplify, and expedite all weather activities; 2) it would be consistent with recent precedents established in assigning to the Commanding General, AAF complete responsibility for aircraft communications, aircraft crash rescue, and other equipment used predominantly by the AAF; and 3) it would utilize the present channels and procedures used in fulfilling the same functions concerning other aircraft supplies and equipment.16 Although the lines of logical responsibility seem fairly clear in regard to these functions, the staff study was still in G-4 on 15 November.

The most inclusive transfers of functions to the AAF were those concerning aircraft crash rescue and fire fighting. In the fields of communications and weather the AAF already had operating responsibility, with the result that it acquired—or was attempting to acquire—the responsibilities that lay behind operations. In crash rescue and fire fighting, however, all functions belonged to the Engineers before the functions were transferred in toto to the AAF.

The acquisition of these functions was a natural outgrowth of the integration of the arms and services with the AAF (ASWAAF) into the AAF and more particularly of the transfer of most ASF responsibilities at Class III (AAF) installations to the AAF.17 An arms and services integration subcommittee on crash rescue and fire fighting, charged with drafting regulations assigning responsibilities for structural fire protection and aircraft crash rescue and fire activities, held its first meeting on 13 October 1944. Four days later proposals had been drafted, and by 14 December a recommendation concurred in by the Commanding General, ASF was made to transfer all responsibilities pertaining to aircraft crash rescue and fire fighting to the AAF.18

The major problem encountered was the separation of structural fire-fighting activities from those involved in air operations. This difficulty was resolved, and on 30 January 1945 provision was made that all functions and responsibilities for activities pertaining to aircraft crash rescue on land and water and to aircraft fire fighting be transferred from the ASF to the AAF on 15 February.<sup>19</sup>

The Chief of Engineers was not relieved of his Army-wide responsibility for fire prevention and protection "except for aircraft crash rescue and aircraft fire fighting."<sup>20</sup> On 9 March the ASF directed the immediate transfer to the AAF of all personnel engaged primarily in the functions newly assigned to the AAF and two months later ASF Service Commands ceased activities in the aircraft crash-rescue and fire-fighting fields. Technical inspection of *structural* fire-protection activities and equipment of Army-wide application required by Circular No. 388 was continued as a repairs and utilities function of the Engineers.<sup>21</sup>

As was the case with the communications transfer, the process of implementing a shift of functions was enormous. Although many details remained unsettled by the fall of 1945, the functions had been legally acquired; the task of "taking over" required only time.

In order to assure unified command of activities closely associated with the defensive operations of the Air Forces, the AAF initiated a campaign in early 1945 to integrate antiaircraft artillery into its organization. In response to the desires of the Commanding General, AAF, the Special Assistant for Antiaircraft prepared a brief study showing the advantages and disadvantages of integration. On the credit side he concluded that integration would 1) centralize responsibility for planning and conducting air defense, and would ensure a unity of effort not then existing, 2) give to the same man control of all units used in the conduct of air warfare, 3) ensure evolution and eliminate duplication, 4) resolve the existing awkward maintenance and supply situations confronting AAA units controlled tactically by the AAF and administratively by the AGF, and 5) add to the AAF a large complement of Regular Army officers. Disadvantages were seen in 1) the larger and more complex organization of the AAF, 2) the vexing problems of personnel, supply, and administration, 3) the legal inability of the transferred officers to command the combined units, and 4) jurisdictional controversy certain to result from the demands of the ground commanders for antiaircraft protection. He concluded:

It might be said that the same advantages and disadvantages accrue in placing antiaircraft and Air Forces under one command, for purposes of aerial warfare, as would accrue in placing Ground, Naval, and Air Forces under one command for purposes of waging all phases of modern war.<sup>22</sup>

The following July the AC/AS, Plans, in collaboration with the Special Assistant for Anti-aircraft, prepared a study in which air defense was stressed as the first of several missions of the post-war military establishment, because the initial attack in the next war would likely be a gigantic air blow. The mechanism for air defense would, therefore, bear almost the entire burden of national defense and must be organized in the most effective and efficient manner. The control of antiaircraft artillery by the AAF in the Mediterranean and European theaters had been most effec-

tive. Furthermore, after assigning the 4th AA Command to the Fourth Air Force on 1 May 1944 the efficiency of that command had increased and a marked improvement in the air defense organization of the West Coast was noticed.<sup>23</sup>

The study stressed the significance of the security of vital areas rather than the protection of individual objectives within those areas, the desirability for more training in combined operations with fighter aviation and air warning service, the necessity for hand-in-hand development of airpower and air defense, and the importance of immediate integration so that the AAF would have the benefit of wartime experience in solving peacetime problems. The document was transmitted to the General Staff on 4 August 1945 with the recommendation that it be studied by the section and considered for action in the first postwar reorganization of Army components.<sup>24</sup>

#### Consolidation

URING THE COURSE of expansion and rapid growth of the AAF there was a tendency to multiply both the AAF Headquarters offices and field agencies and to increase the number of operating functions performed in Headquarters. This trend was partially justified by the necessity for quick action and the impossibility of separating satisfactorily policy and nonpolicy functions while meeting urgent day-to-day demands. However, as the AAF reached its peak strength and policy became more stabilized, 1) many nonpolicy functions were removed from Headquarters, 2) certain Headquarters offices were consolidated or reduced, and 3) a diminishing of field agencies reporting to Headquarters occurred. This last achievement was made either by merging commands or by creating intermediate coordinating echelons. Thus details of operations that had previously burdened Headquarters were handled at appropriate lower echelons.

The most important single development in the removal of operating functions from Headquarters, AAF and the reduction of commands reporting directly to it came in the creation of the Continental Air Forces (CAF). In proposing this new agency, General Arnold pointed out that the staff in Washington was larger than desirable and that redeployment from the European to the Pacific theater would augment the problems and increase the burdens of the Air Staff. The creation of a Headquarters, Continental Air Forces with jurisdiction over the four domestic air forces and the I Troop Carrier Command would assist the AAF materially in meeting its over-all, world-wide responsibility. Such a reorganization would permit more attention to be given to planning, improve redeployment, and bring the desired reduction of personnel in the AAF. The new command would be charged with 1) the organization or reorganization and training of combat and service units and crews (except air depot groups) for deployment or redeployment to overseas theaters, 2) the formation and command of the continental strategic air reserve, 3) joint air-ground training, and 4) air defense of the continental United States.<sup>1</sup>

The Deputy Chief of Staff, Lt. Gen. T. T. Handy, expressed approval of the new command. He believed that the AAF should determine its own organization, and he agreed with the principle of decentralization. He suggested for consideration, however, placing the Training Command under CAF because the primary mission of the AAF in Headquarters was training. Further, he cautioned, careful consideration should be given to relations of the new CAF Headquarters to Headquarters, AAF and of the latter to the subordinate units of the CAF.<sup>2</sup> However, General Arnold felt that the difference in the jobs to be performed was sufficient justification for continuing the Training Command as it was. The new organization as originally proposed received approval on 17 November 1944.3

The division of responsibilities and delimitation of functions between Headquarters, AAF and the projected Headquarters, CAF were primarily the tasks of AC/AS, OC&R and of Management Control. The activation of Headquarters, CAF was authorized for 15 December 1944 with the functions as stated by the Commanding General, AAF in his initial memo to the General Staff.<sup>4</sup> The originally planned date for assumption of full responsibility by the CAF was 1 September 1945, but in January this was moved up to 1 April.<sup>5</sup> Although the CAF assumed jurisdiction over the



four domestic air forces and the I Troop Carrier Command on 8 May 1945, its operations for that month were only of a limited nature. In June the CAF was charged with the full responsibility for the functions for which it was created, with redeployment being its major wartime task.<sup>6</sup>

The creation of the AAF Center in June 1945 was another significant example of the trend toward reduction in the number of field agencies reporting directly to Headquarters, AAF and of the administrative consolidation of closely related activities. The need for more efficient control over the development of tactics, techniques, doctrine, and other military requirements of the AAF became more apparent as operational experience, and demands resulting from such experience, increased. Testing facilities were obviously so closely associated in the development of these requirements that the need for more coordination was evident.

The AAF Tactical Center, the Proving Ground Command, and the AAF Board had operated in the Orlando-Eglin Field orbit since October 1943.7 In this arrangement the AAF Board was supposed to determine the military requirements for the AAF, but actually this was not the case. During early 1944 this board functioned under the direction of the Assistant Chief of Air Staff, OC&R, who was its president. OC&R, or more specifically the Requirements Division, performed the determinative functions. Nor did the situation seem to be bettered by the appointment of a separate president for the board. In essence the AAF Board directed the tests and projects of the Proving Ground Command and Demonstration Air Force in such detail that it lost sight of the broader phase of determining AAF requirements.8

The desire to bring about better coordination and efficiency between these agencies and to revamp the school to meet the need for properly trained administrative officers prompted recommendations for changes. In January 1945 Brig. Gen. E. L. Eubank, president of the AAF Board, thought that its divisions might be reduced from six to two and that the agency might in time become comparable to the Navy General Board.<sup>9</sup> Five weeks later the Chief of Air Staff asked the Commanding General, AAF Tactical Center (AAFTAC) if the "return" of the Center justified the investment of 9,000 military personnel, 3,000 civilian personnel, and 150 aircraft. He wished to

know if a considerable reduction in personnel and equipment could be effected without injuring the operations.<sup>10</sup> In his answer, Maj. Gen. E. J. House saw little possibility of reducing forces but suggested that the Tactical Center be renamed the AAF School, that the Commanding General, AAFTAC become Commandant of the School, and that the Commandant of the School also be president of the AAF Board.<sup>11</sup>

The Chief, Management Control a few days later pointed out the constantly increasing responsibilities of the AAF, the necessity of shifting the emphasis at the AAF School of Applied Tactics (AAFSAT) from wartime combat tactics to a peacetime basis, and the desire for a higher type of training for key AAF officers. He recommended that the commandant of the school and the president of the board be the same individual.12 Management Control, Training, and OC&R then worked out a plan which claimed the following advantages: 1) more efficient utilization of the materiel and personnel resources at Orlando and Eglin fields, 2) decentralization of detail from Headquarters, AAF, 3) adjudication of the frequently competing requirements of development, testing, and training activities, 4) expansion of the mission of the School of Applied Tactics and elevation of this institution to the status of an "air university," and 5) concentration of training activities at Orlando and testing activities at Eglin Field.13

The plan was approved by the Acting Chief of Air Staff on 16 April 1945, and on 23, 24, and 25 April conferences were held at Orlando between key officials there and several Headquarters, AAF representatives. It was agreed that the AAF Center would be established as a coordinating administrative agency and the testing elements (including the AAF Board) would be concentrated eventually at Eglin Field. The School of Applied Tactics was to be renamed the AAF School and would be reorganized in accordance with the ideas which Management Control had presented to the Chief of Air Staff on 11 April. After the conference at Orlando, the representatives went to Eglin Field where they found Brig. Gen. Grandison Gardner, Commanding General, Proving Ground Command, in general agreement with the conclusions previously reached.14

On 1 June 1945 the reorganization became effective. The Commanding General, AAF Center

began exercising command jurisdiction over the AAF Board, School, and Proving Ground Command, the commanding officers of which he appointed.

The AAF Board, composed of its president, the Commanding General, AAF Center, the Commanding General, Proving Ground Command, and a recorder without vote, was made responsible for the development of tactics, techniques, doctrines, and other military requirements of the AAF and for appropriate recommendations to higher authorities concerning these activities. The School was to give advanced academic instruction in the major requirements. The testing facilities were concentrated at Eglin Field.<sup>15</sup> The Commanding General, Proving Ground Command was charged with conducting tests to improve operational techniques; with determining operational suitability, new and different tactics, and techniques of aerial warfare under simulated combat conditions; and with testing under simulated combat conditions the tactical suitability of materiel and equipment used or proposed for use by the AAF.16

This shifting and reassignment of responsibilities brought the equipment and operational testing under one authority, established the school on a firmer academic basis by reducing the time devoted to purely military matters, redefined the authority of the AAF Board, drew sharper lines of responsibilities for the several agencies, and created a coordinating authority that resulted in greater efficiency and cooperation, as well as relieving Headquarters, AAF of many of the details attendant upon actual operations.<sup>17</sup>

Another reduction in the number of officials reporting directly to Headquarters, AAF was brought about by the consolidation of the Materiel and Air Service Commands into the Air Technical Service Command. Although this reorganization, which combined closely related activities in the supply and service fields under one command, was actually accomplished prior to the creation of the CAF, and similar problems were faced and resolved, there was not a noticeable interrelationship in the action on the two. In solving the problem related to the Materiel and Air Service Commands the officials concerned were apparently attempting to eliminate inefficient operations rather than to follow a principle of decentralization and consolidation of command.18

As early as the fall of 1942 a proposal was made

to consolidate the control of the Air Service, Materiel, and Air Transport Commands under a commanding general of an air logistics command.19 The purpose behind this suggestion appeared to have been the creation of a supply force for the air arm. Although the proposal was twice repeated during 1943, not much interest was aroused until April 1944 when the Chief of Organizational Planning pointed out that over two years of experience with the development of the field organization for supply matters had brought certain basic problems into relief. Among these were 1) lack of harmony between AAF Headquarters, the Materiel Command, and the Air Service Command, 2) an unnatural division of responsibilities and overlapping and conflicting geographical boundaries relative to the procurement, distribution, and using agencies in the AAF, 3) lack of harmony between the supply and other major AAF agencies, and 4) lack of clearly defined policies, exercise of broad controls, and adequately qualified personnel. Either a shifting of personnel or an organizational change would bring a solution to these problems. The latter was thought to be preferable, and it was suggested that a deputy chief of air staff for materiel and supply be created and the Materiel and Air Service Commands be combined.20

Before any definite action had been taken on this proposal, the Commanding General, Air Service Command presented a plan to split AAF Headquarters responsibilities in a manner similar to to the functional divisions between the Air Service and Materiel Commands.21 Such a solution, Organizational Planning objected, would not strengthen the supply and maintenance agency in Headquarters but would deprive it of unified leadership and bring further confusion in the commands. The redesignation of AC/AS, Materiel, Maintenance and Distribution (MM&D) as AC/AS, Materiel and Services (M&S) and the amalgamation of the commands would bring a uniformity of organization, a logical succession of activities (for it was felt that planning and action on supply matters should not be split), a streamlining of procedures, and a clean-cut authority in Headquarters and command.22 After some maneuvering in the AAF, the Assistant Secretary of War for Air expressed approval of the consolidation principle, but he cautioned that unless the correct man were found to head the new command the

organizational change might have detrimental rather than beneficial results.<sup>23</sup>

Reorganization planning continued. On 23 June a proposed AAF Regulation 20- creating an assistant chief of air staff for materiel services and an air materiel services command was transmitted to the Chief of Air Staff. At about the same time Lt. Gen. William S. Knudsen, Director of Production for the War Department, visited Wright and Patterson Fields. Following this visit he proposed that consolidation of the commands be postponed until after the European war had ended. The plans, however, should be ready.<sup>24</sup> General Arnold, on the other hand, proposed that General Knudsen be made his representative as head of a new command for the purpose of decentralizing as far as possible all materiel activities from Washington to the field. Knudsen's primary function was to be the gradual integration of the two commands into one; a period of six months was suggested as reasonable to accomplish this.25

The establishment of the new office, AAF Materiel and Services, was directed on 14 July, the Air Service and Materiel Commands to be placed under the director of the new office. Three days later the functions were given in greater detail by AAF Headquarters, and AC/AS, MM&D was redesignated AC/AS, M&S in order to parallel more closely the field organization.<sup>26</sup> AAF Regulation

20-43 of 17 July 1944 stated that one of the responsibilities of the new commander war the ultimate merging of the Materiel and Air Service Commands "into a single command, based upon the policy of complete and thorough consolidation, integration and functionalization of activities, operations and facilities under his jurisdiction." The only difference between this and the superseding Regulation 20-43 of 27 July 1944 was a lessening by the later document of the expressed controls of the AC/AS, M&S over the director of the new command.

The process of integrating the commands was more rapid than anticipated. On 31 August 1944 the consolidated agency was designated the Air Technical Service Command and charged with responsibility for accomplishing the operating program of the AAF in the field of materiel and supply.27 After a three-year separation into two commands-between which the lines of responsibilities and functions had never been clear—the greater portion of all AAF materiel and supply activities again were made the responsibility of a single command. Activities were thus more logically arranged, the number of agencies reporting to AAF Headquarters was reduced, more functions were decentralized to the field, and responsibility for performance or lack of performance could be more definitely and quickly fixed.

### **Post-Hostilities Organization**

THE FUNDAMENTAL framework of the organization established on 29 March 1943 existed until after the cessation of hostilities with Japan. During the period from December 1943 until 23 August 1945 some realignments and shiftings occurred but the basic structure was unaltered.

In AAF Headquarters there were some transfers and retransfers and an increase in the number of special assistants to the Commanding General. The additions included a scientific advisory group and special assistants for Latin American activities and for program control. Together with special consultants in communications, supply and procurement, and weather these advisers were responsible for the planning and execution of important phases of AAF activity.<sup>1</sup>

For some time the possibility of the reassignment of the Air Provost Marshal and Air Finance Officer was also considered. When action was taken, the merits of having these officers function under some agency other than Materiel and Services seems to have had little if any influence. On 29 August 1944 the AC/AS, M&S reminded the Chief, Management Control that the personnel of M&S had to be reduced to 436 by 1 September.<sup>2</sup> In this reduction, he understood that Management Control [AFDMC] was acting to transfer the Air Provost Marshal (22 officers) and the Air Finance Office (5 officers) out of M&S. Subsequently, the Air Finance Officer was transferred to the Budget and Fiscal Office, and the Air Provost Marshal was shifted to AC/AS, Intelligence. Two weeks later the Air Provost Marshal was shifted to AC/AS, Personnel, and on 10 July 1945 the Air Finance Officer was returned to the jurisdiction of M&S.3

The AAF public relations office, which had officially been discontinued in 1942 but had func-

tioned in the form of the Technical Information Division of AC/AS, Intelligence, was set up as a special staff in the spring of 1944. Its powers were redefined and expanded in June of that year, and in November it was redesignated the Office of Information Services and attached to the Chief of Air Staff.<sup>4</sup>

The establishment of the Flight Operations Division in AC/AS, Training in July 1944 was perhaps the first indication of the movement toward a postwar AAF Headquarters organization and the recombination of the training and operations functions into one office. The division initially was concerned principally with civilian traffic, but its purpose was to establish uniform methods of clearance and flight briefing of military aircraft and to coordinate aircraft and airway traffic-control services with military and civilian agencies.<sup>5</sup>

In late October 1944 some rather significant changes were instigated; on 30 October General Arnold directed the Chief of Air Staff as follows: 1) to transfer the Commitments Division, OC&R to Operational Plans of AC/AS, Plans; 2) to redesignate OC&R as Organization, Training, and Requirements (OT&R); 3) to make AC/AS, Training the Training Division of OT&R; 4) to transfer Organizational Planning (AFMOP), less a few functions, to OT&R; 5) to reassign Manpower to AC/AS, Personnel; and 6) to eliminate AFDMC and establish a secretariat. The changes were to be made in two months with a minimum disruption of work and movement of personnel and offices and a maximum preservation of integrity of divisions and branches. The Chief of Air Staff was authorized to make any necessary adjustments to achieve an efficient and smooth-working organization.6

The Chief of Air Staff directed AC/AS, OC&R to confer with the various offices involved and to submit by 1 December a means of effecting the reorganization. The provision concerning AFDMC was ommitted from his communication. AC/AS, OC&R was, by conference with AC/AS, M&S, to eliminate duplication and overlapping of functions between OC&R and M&S. The appropriate Deputy Chief of Air Staff was to arbitrate any disagreements that might arise. Approximately three weeks later, AC/AS, OC&R submitted drafts of directives that would effect on 15 December the proposed transfer of the Commitments Division and the consolidation of OC&R and Training into OT&R. He recommended, however, that further consideration be given to the manpower transfer.8

On that same date, 25 November, the Chief, AFDMC expressed his approval of the creation of the OT&R office, but questioned the timeliness of the change in view of imminent creation of the Continental Air Forces. He recommended approval of the merger in principle but suggested delay in putting it into effect. Apparently this memo was effective, for on 4 December the Chief of Air Staff, taking cognizance of the rumors concerning reorganization, stated that a reorganization study had been prepared but thorough consideration had dictated that no major changes were to be made at that time. Minor readjustments, he noted, were always necessary.

Between the time of this proposed shifting and the realignment of August 1945 there were no important changes in Headquarters, AAF. In that period, however, a definite trend toward the peacetime principle of reducing the number of agencies reporting to AAF Headquarters was noticed in the creation of the Continental Air Forces and the AAF Center, both of which became operative on 1 June 1945, and in the reorganization of the Weather Service on a command basis one month later.<sup>11</sup>

With the war in Germany ended and the Pacific hostilities rapidly reaching a climax, attention was turned to "shaking down" the AAF Headquarters. The organization in existence in July 1945 was admittedly a wartime structure, and many returnees had difficulty in understanding the terminology since they were accustomed to the A-1, A-2, A-3, A-4, A-5 setup in the theaters. This unfamiliarity with Headquarters terminology and the necessity for movement toward a peacetime or-

ganization, accentuated by the increasing tempo of the war with the Japanese, led on 23 August 1945 to the first major realignment, since March 1943.

The basis of this reorganization had been sketched out before the middle of August, but the only documentary materials were a few roughdraft charts which Statistical Control was attempting to bring together in an understandable form. Lt. Col. J. O. Wright utilized these unfinished charts, together with suggestions made by the Chief of Air Staff, in formulating proposals which led to the establishment of the new structure. By this change, the Special Staff was eliminated; the Air Inspector and Budget and Fiscal Officer were attached directly to the Office of the Commanding General, AAF, while Special Projects, Legislative Services, Headquarters Commandant, and the Office of the Historian joined Statistical Control and Program Monitoring in the office of the Secretary of Air Staff.<sup>12</sup> The Air Surgeon and Air Judge Advocate were assigned to AC/AS-1, while the Air Communications Office, the Special Assistant for Antiaircraft, and the Office of Flying Safety went to AC/AS-3.

AC/AS, OC&R was eliminated, which reduced the number of assistant chiefs of air staff to five (AC/AS-1, -2, -3, 4, and -5), corresponding roughly to the general breakdown of Personnel, Intelligence, Training and Operations, Materiel and Supply, and Plans. The vast majority of the functions of OC&R went to AC/AS-3, while certain eliminations and additions occurred in the other staffs to bring them more in line with their modified tasks. The deputy chiefs of air staff were reduced to one.

The limitations of the structure established on 23 August were well recognized. Some offices which did not exist were sketched into the chart (between the assistant chiefs of air staff and the division level) in order to bring the organization more in line with the existing echelons of authority and responsibility. In this way the designations which had come into use by the latter part of July<sup>13</sup> were made official, and the elimination of special offices was begun. Also an organizational pattern that could later be trimmed was established.<sup>14</sup>

Under this new grouping the assistant chiefs of air staff were not given the usual amount of directing and supervisory authority, but were termed "primarily monitors and coordinators of the groups of allied interests under their cognizance." This statement of authority to be vested in the assistant chiefs was probably prompted by the fact that the organization was conceived before the capitulation of the Japanese and by a fear that the sudden curtailment of authority of the Special Staff might result in unnecessary and undesirable complications.

The day after the changes became official Maj. Gen. Charles C. Chauncey, Acting Chief of Air Staff, informed staff officers that the 23 August framework had been based upon the assumption that the Japanese war would continue for some time. "It is obvious," he stated, "that the size of the organization as now published is unnecessary for posthostilities purposes. There are many agencies and functions that can be consolidated and many can be eliminated entirely." The officers were instructed to prepare a new chart based on actual post-hostilities requirements. The principles set forth in Hq. O.I. 20-1 of 23 August were to serve as a guide.16 Three days later a draft AAF Reg. 20-1 was sent to the various offices with the request that the functions of each office and of commands for which the office might be responsible be reviewed. Comments were to be confined to broad statements of functions and were not to consist of elaborations or breakdowns of functions set forth in the regulation. Functions were to be eliminated, curtailed, or consolidated wherever possible.17

The comments received did not propose a drastic reshifting of offices. There was some doubt, however, that a new directive should be published at that time and a rather general feeling that more authority should be given to the assistant chiefs of air staff. Maj. Gen. F. L. Anderson, AC/AS-1, emphasized that the "positive organizational requirements" of the post-hostilities period had been included in the 23 August organization of AC/AS-1, but that some inconsequential shifting could be done in the offices of the Air Judge Advocate and Air Provost Marshal. More significant was the attached draft Hq. O.I. 20- which stated that AC/AS-1 "plans, directs and supervises the activities of the office." 18

On 31 August Lt. Gen. Hoyt S. Vandenberg, AC/AS-3, placed all subordinate units in his office on the division level and reported that the intermediate Training and Operations office had been

eliminated. Five days later he expressed the conviction that the assistant chiefs of air staff should "supervise and direct" rather than "monitor and coordinate" the activities of their offices. His main reason was that since Headquarters, AAF had been reduced and a more compact and streamlined organization achieved, there was less justification for coordinators.<sup>10</sup>

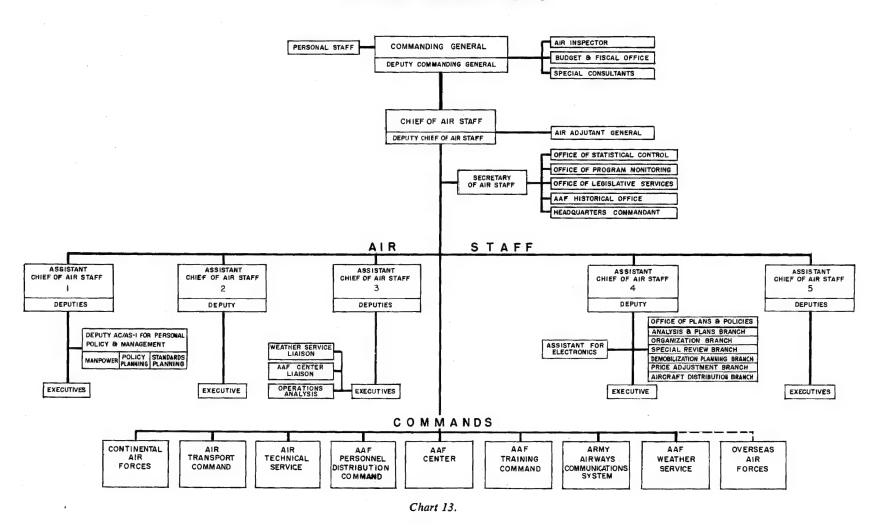
The comments of Maj. Gen. E. M. Powers, AC/AS-4 (Acting), paralleled closely those of AC/AS-3. He pointed out that his divisions had been reduced from 17 to 12 since 1 July. The office of Materiel and Services, as shown on the 23 August organization chart, he considered unnecessary since the divisions had always worked with highest intraoffice authority on problems involving personnel, administration, and organization. He thought that his office should have "directing and supervisory" authority over the subordinate units; only since the 23 August shifting had the assistant chiefs of air staff been confined to coordinating and monitoring responsibilities.<sup>20</sup>

Maj. Gen. L. S. Norstad, AC/AS-5, felt that the thinking on many activities had not progressed to a point where publication of a new regulation could be "anything but an unsatisfactory interim measure." For this reason he considered it unwise to issue a statement of functions which might lead to faulty internal organization, but he suggested that he initiate and guide staff action concerning "broad policy on all matters pertaining to relations and responsibilities of the AAF with external organizations and with internal agencies of the AAF."<sup>21</sup>

The new organization became effective on 15 September 1945.\* The major units of the several offices were designated as divisions immediately subordinate to an assistant chief of air staff, his deputy, and his executive.† The nonexistent offices were eliminated from the chart, the six divisions of AC/AS-2 were reduced to three, and the major subordinate units of AC/AS-5 were limited to the same number. More important from the standpoint of administration and the execution of delegated functions was the change in authority of the assistant chiefs of air staff. All were given supervisory control "except that the Assistant Chief of Air Staff-1 will have coordinating and monitoring responsibility only for the activities and functions of the office of the Air Surgeon."22

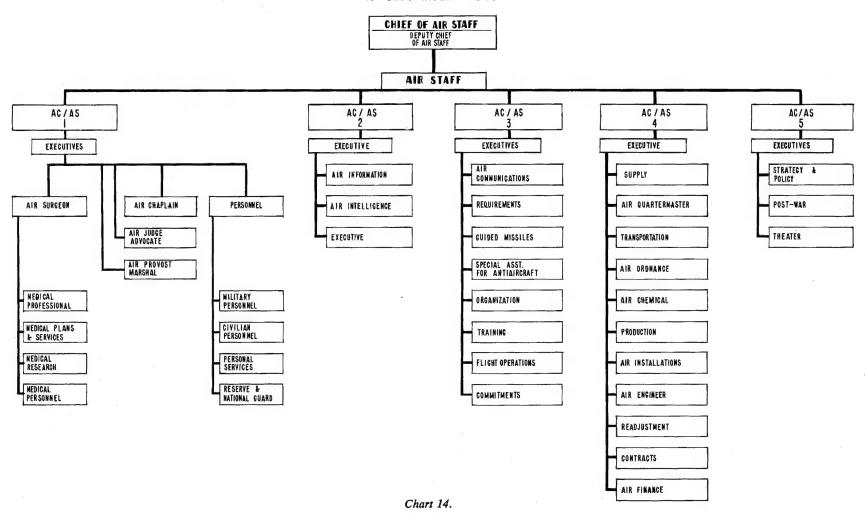
<sup>\*</sup>See Chart 13, p. 64. †See Chart 14, p. 65.

# ORGANIZATION OF THE ARMY AIR FORCES 15 SEPTEMBER 1945



#### AIR STAFF DIVISIONS

15 SEPTEMBER 1945



Definite progress had been made for peacetime administration and development in the grouping of related activities, in the elimination of duplication within AAF Headquarters, and in the reduction of the number of personnel reporting directly to the Chief of Air Staff or higher authority. Several significant organizational problems outside of Headquarters remained unsolved, but these involved primarily relationships with other services.

As early as December 1943 plans were drawn for a postwar air force; periodically these were redrawn. All appear to have been based on the premise that the AAF would acquire a position equal to that of the Navy and the Army within the framework of a Department of National Defense.<sup>23</sup> Should this premise be established, several AAF organizational schemes were in readiness.<sup>24</sup>

Another problem not associated with the organizational position of the AAF but vitally affecting its relations with other combat elements concerned the establishment of a unified postwar operational air force. Discussion of such an organization seems to have begun in November 1944,25 and in June 1945 the Chief of Staff, CAF proposed that such a unit, composed of at least two tactical air commands and a bomber command, be created. The suggested date for effecting this step was 1 October. The duties of the First Air Force were to be assigned to the other three continental air forces; the tactical air division and other units were then to be placed under the First. The mission of the new agency would be to: 1) maintain and develop tactical air force organization, techniques, and doctrines in conjunction with the AAF Board; 2) provide air-ground training for combat units and crews prior to overseas shipment; 3) provide air force units for all air-ground training conducted with AGF and ASF and for all joint training conducted with the Navy; 4) establish close liaison with the Navy's air support training establishments and determine improved methods of joint operations; 5) monitor all air-ground activities to assure a creditable AAF participation; and 6) provide mobile air force units to assist in the air defense of the United States. The Chief of Staff, CAF emphasized the necessity of placing greater emphasis on training and equipment of crews and units for ground cooperation and joint operations and of assuring full participation in this type of training. Army Ground Forces was advocating

organic support aviation since it felt that the AAF had given low priority to the air-ground units. The Navy, meanwhile, had established eight air-ground support training centers in the United States and was giving all its combat units thorough training in air-ground cooperation. If the AAF were to keep abreast of these developments and to accomplish properly its assigned mission, the creation of an agency for this specific role was deemed highly desirable.26 The Assistant Chief of Air Staff, OC&R agreed with the desirability of placing more emphasis on the training of tactical air force elements, and in response to his request the CAF submitted a proposal to accomplish the objective without disruption or loss of efficiency in training.27 Such an agency was still in the planning stage in October 1945.

The AAF continued to plan the organization best suited to carry out its mission, whether as a separate air force or within the framework of a department of national defense. An informal board of AC/AS-3 worked on this problem from 4 to 24 October when, by directive of the Deputy Commanding General, AAF, the project was turned over to AC/AS-5. The unfinished study stated the missions of the air force and pointed out that no matter what form the higher authority might take, the air force should provide for the Army and Navy those services "which it is the best prepared of the three components to perform (e.g., Air Transport Service)." It must be selfsufficient to the extent necessary for the performance of its mission, but "it should assume no responsibilities of functions which others can furnish to our satisfaction."

The board felt that a single department was the best solution, that common services and the procurement of common supplies would initially be furnished by the agency best prepared to furnish them, and that eventually there "would evolve, based upon experience . . . , a separate organization to take over common functions." In the event that there should be an Army, Navy, and "Air Force" under a Joint Chiefs of Staff arrangement, "the Air Force must be completely self-sufficient and would have to take over from the Army all those things necessary to make it completely selfsufficient." If a single department were established, only a few changes would be necessary in the existing over-all AAF organization; on the other hand, a separate air force would necessitate

"substantial changes" in Headquarters, AAF. The problem of "unionization" of personnel was also considered and it was contended that ASWAAF personnel should be air force personnel either in a single department or a separate air force. The

possibility of organizing the personnel into a technical branch, an administrative branch, and a line branch, with provisions for transfer or reassignment, was broached as a solution to the categorizing of personnel.<sup>28</sup>

## Conclusion

THE HISTORY of the organization of the air arm from its origin to September 1945 was a stormy one which centered about the attainment of a position of increased importance in the military organization of the nation. At times this took the shape of a concerted effort for an independent air force, at other times the lesser goal of autonomy within the War Department was the object. Differing concepts of warfare colored the attitude of the individuals concerned with these activities, and in the main "standpattism" was the motivating factor on the part of those in power. It was not until June 1941 that any degree of autonomy was achieved, and this advance was partially offset by the extremely cumbersome organization of the air arm. But by the March 1942 reorganization a measure of relief was obtained. This major shake-up gave to the Army Air Forces true autonomy within the War Department.

Autonomy in the Zone of the Interior was supplemented by the grant of equality with the Army Ground Forces in the theaters of combat. When the March 1942 organization was established it was to endure only six months after the termination of the war. The postwar organization, therefore, soon became a matter for study by various groups in the AAF. By September 1945 certain trends, such as the elimination of arms and services branch distinctions and the acquisition of new responsibilities, indicated a greater freedom of action for the Army Air Forces.

Internally, the organization of the air arm assumed more significance as varying degrees of autonomy were granted and as great technological advances were made. The latitude of action and the necessity for agencies to handle new developments led to a more careful consideration of the

distribution and allocation of responsibilities and functions among the various units. The trial of the policy-operating staff principle taught air officers many lessons in the distribution of responsibilities, as well as the impracticability of attempting a policy-operating division at Headquarters level without adequate previous experience in the policy line. The recognition that organization was a matter worthy of constant consideration was a major step forward.

The creation of the directorates, or operating staff, in March 1942 represented a definite recognition of the importance of placing in key positions experts in the various aspects of military aviation. It was the intention of those who established the operating staff that these experts should implement and help to execute the plans formulated by the policy staff. The necessity of making day-to-day decisions that became precedents for policy action, as well as the ill-defined spheres of jurisdiction of the two staffs, allowed the operating staff to usurp many of the prerogatives of the policy staff and burdened the directorates with details to such an extent that proper performance of their intended functions became impossible. The most practical solution to the problem was effected when the two staffs were combined in March 1943.

Although there has been sharp criticism of the quality of planning in the AAF, it should be recognized that responsibility for such activity had not rested with the AAF for a great length of time. Unquestionably, performance in this respect increased as experience was gained by the individuals concerned. When war came they were forced to operate in an economy of scarcity which precluded for most of them the possibility of long-range planning. The "spilling over" of the staff into the

activities of the directorates, and vice versa, was a development to be expected in the light of background and prevailing conditions. The nature, experience, and traditional prerogatives of military activity will probably long prevent a clear-cut delimination between the policy and operating functions of a staff nature.

The relationship of AAF. Headquarters and field, whether expressed in the command or the bureau principle, was a cause of considerable dissension and dissatisfaction. In many instances the exact degree of control to be exercised by each was not determined, and consequently causes for altercation remained. Furthermore, there was an overlapping of functions among some of the field agencies, especially in the supply line. Fortunately, the work of Management Control, and more specifically Organizational Planning, was of great value in preventing overlapping in Headquarters and field agencies and in contributing toward a smoother working relationship between Headquarters and field units.

The establishment of Management Control with its subsidiary divisions represented one of the most significant steps in the AAF organization. This agency did much toward clarifying responsibilities, increasing administrative efficiency, testing the accuracy of staff planning factors by means of statistical analyses, and increasing the utilization of manpower, as well as performing many other significant services. Much remained to be done along these lines when Management Control was dissolved. It is of consequence, however, that even for three and one-half years the principle of centralized management and control was recognized. Through constant study and monitoring the office contributed to the smoothness of operation by building a more efficient organization and instituting and maintaining uniform practices and procedures, although, of course, it did not bring about all needed reforms nor were some of its activities above criticism.

As the war moved toward its close, the AAF ac-

quired significant responsibilities in the communications and aircraft crash rescue and fire fighting fields and was about to acquire important functions in regard to weather equipment. The acquisition of these new responsibilities helped to eliminate conflicts between the AAF and the ASF, as well as to move the AAF closer to its goal of becoming a self-impelled, self-contained agency.

Also, the AAF had, by September 1945, taken steps to reduce the number of field agencies reporting to Headquarters and to decentralize operating functions from Headquarters to the field. The reduction of the number of offices in Headquarters, either by elimination or consolidation, was a retrenchment trend exemplified in the reorganizations of 23 August and 15 September 1945. Although much pruning was still necessary to bring the AAF Headquarters structure to a peacetime basis, a beginning had definitely been made within one month after V-J Day.

One other development deserves especial mention. Program planning, which had received virtually no consideration prior to America's entry into the war, became recognized as one of the most inclusive and difficult activities in the Army Air Forces. For some time program planning was hampered by an inadequate staff, the failure of some offices to accept their responsibilities in this field, the assumption by the program planning staff of tasks involving too many minutiae, lack of appreciation and understanding of the necessity for controlled program scheduling in many Headquarters offices, and the low organizational position of the program planning unit. Only at the beginning of its existence and after the termination of hostilities was the agency placed on a sufficiently high echelon to ensure proper control of this function. As a part of the office of the AC/AS, OC&R its authority was not commensurate with its responsibility, and though it accomplished much, it was not able to ensure the desired synchronization of the various factors in the programs.

#### **Footnotes**

#### CHAPTER I

- Final Report of War Department Special Committee
  [Baker Board] on Army Air Corps, July 18, 1934,
  p. 67. James H. Doolittle presented a minority report in which he expressed preference for a separate
  air force. If this were not possible, an air force in
  the Army with a separate budget and promotion list
  but not under the General Staff was desired. If
  neither of these realignments could be effected, then
  he would approve the majority report.
- 2. AG 320.2 (12-19-34), Misc (Ret)-C, 31 Dec 34.
- 3. Lt Col Ralph Royce to CG VI Corps Area, 25 Nov 35, in AG 320.2 (9-13-34), pt 1, sec 1-b.
- 4. AG 320.2 (9-11-35) C, 13 Sep 35.
- Report of [Browning] board appointed to survey personnel situation of the Air Corps, 7 Jan 36, in AAG 334.7, Boards, General.
- Memo for C/S by Maj Gen F.M. Andrews, 26 Mar 36, in AG 320.2 (9-13-34), pt 1, sec 1-b.
- Summary of opinions of AC/S, G-3, contained in unsigned copy of memo for DC/S, 17 Apr 36, in AG 320.2 (9-13-34).
- Memo for C/S by Maj Gen G.S. Simonds, 29 Apr 36, in AG 320.2 (9-13-34).
- 9. AG 320.3 (5-5-36), Misc (Ret)-MC, 8 May 36.
- 10. AG 320.2 M-C-M (11-14-40), 19 Nov 40.
- 11. Memo for C/S by Maj Gen F.M. Andrews, 2 Nov 35, in AG 320.2 (11-2-35).
- 12. Ibid.
- 13. Memo for DC/S by Maj Gen Oscar Westover, 17 Jan 36, in AG 320.2 (11-2-35).
- Report of [Browning] board appointed to survey personnel situation of the Air Corps, 7 Jan 36, in AAG 334.7, Boards, General.
- 15. The other representative of the GHQ Air Force, Brig Gen H.C. Pratt, agreed with the board's findings. (For this report and controversy, see AAG 321.9, Board Reports (Bulk), AAG 321.9, Orgn GHQ Air Force . . . Air Corps, and AG 320.2 (9-13-34), pt 1, sec 1-b.)
- 16. Memo for C/S by Maj Gen Oscar Westover, 25 Apr 36, in AG 320.2 (9-13-34), pt 1, sec 1-b.
- 17. Memo for C/S by Maj Gen George S. Simonds, DC/S, 29 Apr 36, in AG 320.2 (9-13-34).
- 18. Memo for DC/S by Maj Gen F.M. Andrews, 23 Jul 36, in AG 320.2 (9-13-34).

- Report of Maj Gen Oscar Westover to AG, 1 May
   in AAG 321.9, GHQ Air Force . . . Air Corps.
- Report of Maj Gen F.M. Andrews to AG, 1 May 37, in AAG 321.9, GHQ Air Force... Air Corps.
- Maj Gen F.M. Andrews to Brig Gen H.H. Arnold, 15 Oct 37, in AAG 321.9, GHQ Air Force . . . Air Corps.
- 22. Memo for AC/S, G-3 by C/AC, 23 Feb 39, in AAG 321.9, GHQ Air Force . . . Air Corps.
- 23. AG 320.2 (2-15-39), Misc C-M, 1 Mar 39.
- Memo for AC/S G-1 by Maj C.E. Duncan, Exec OCAC, 3 Mar 39, in AAG 321.9, GHQ Air Force ... Air Corps.
- Unsigned copy of letter to Maj Gen H.H. Arnold, 30 Jul 40, and Arnold's notes on same, n.d., in AAG 321.9, GHQ Air Force... Air Corps.
- 26. AG 320.2 M-C-M (11-14-40), 19 Nov 40.
- 27. The air leaders strongly objected to the creation of station complements under the corps area commanders. They pointed out that this relationship had existed during the first two years of the GHQ Air Force and had been discarded as unsatisfactory. (Memo for C/S by Brig Gen Wade Haislip, AC/S G-1, subj: Personnel for Station Complement etc., 15 Mar 41, and 1st ind (AG to C/AC, subj: Station Complements etc., 17 Feb 41) Brig Gen Carl Spaatz, AC/AC, Plans, to AG, 12 Mar 41, in AG 320.2 M-C-M (11-14-40).)
- AG 320.2 (2-28-41) M-WPD-M, 17 Mar 41. Action was taken by Headquarters, GHQ Air Force on 26 Mar 41, by GO No. 11.
- 29. GHQ was to exercise jurisdiction similar to that of Army commanders "over all harbor defense and mobile troops, including GHQ aviation and the Armored Force; but excluding the overseas garrisons." (AG 320.2 (7-26-40) M(Ret) M-OCS, 26 Jul 40.) GHQ was abolished 9 March 1942.
- 30. Memo for C/S (thru Acting DC/S for Air) by Maj Gen G.H. Brett, 26 Dec 40, in AAG 322.082, Air Districts. It should be noted that the arms represented by Brett's proposed assistant secretaries of war implied a fundamental reorganization of the War Department.
- Letters to chairmen of Senate and House military affairs committees, 20 Jun 41, made public in WD Press Release, 21 Jun 41.
- 32. Ibid.
- 33. W.F. Craven and J.L. Cate, eds, The Army Air Forces in World War II, VI (Chicago, 1955), 24-25;

- M.S. Watson, Chief of Staff: Prewar Plans and Preparations, U.S. Army in World War II (Washington, 1950), p. 293.
- 34. Ray S. Cline, Washington Command Post: The Operations Division, U.S. Army in World War II (Washington, 1951), pp. 23, 68.
- Conversation by author with Lt Col J.S. Clark, Jr., Dir of Organizational Planning, 27 Jul 43, typescript in AFSHO files.
- Memo for AC/S, WPD, 24 Oct 41, in AAG 321.9D
   Orgn AAF; AAF in WW II, VI, 24-25.
- 37. Notes used by Brig Gen L.S. Kuter in conference with AAF commanders, 6 Apr 42, in AFSHO files. The General Staff then had only two Air Corps men on it.
- 38. AAF in WW II, VI, 26-27.
- 39. Draft of bill sent by Legislative Analysis Sec. A-1 to Brig Gen Carl Spaatz, 18 Nov 41, in AFMOP files. The elements of the air arm were to be the Combat Command, the Service Command, the Army Air Forces, and Air Staff.
- 40. Ibid. The imminence of war was primarly responsible for the decision of 6 October to abandon, temporarily, the movement for a separate air force. (R&R, AC/AS, A-1 to C/AS, 10 Oct 41, in AFSHO files.)
- 41. Memo for AG by Lt Gen H.H. Arnold, 19 Jan 42, in AG 381 (1-19-42), pt 2. General Arnold, in his capacity as Acting Deputy Chief of Staff for Air, directed that no action be taken on this statement but that it be held for consideration by General McNarney as evidence of flaws in the current organization. (Memo for Col [Walter B. (?)] Smith by Lt Col L.S. Kuter, 24 Jan 42, in same file.)
- Interview by author and Lt H.S. Bingham with L.W. Hoelscher of the Bureau of the Budget, 27 Jul 43, in USAF HD 105.5-6.
- 43. Ibid.
- 44. Memo for C/S by Air War Plans Div, 9 Jan 42, in AAG 321.9, Orgn AAF. The proposed organization differed in slight detail from the frequently advocated Department of National Defense.
- 45. Hoelscher interview; interview by author and Miss Jackson with Lt Col J.S. Clark, Jr., 15 Apr 43, in USAF HD 105.5-6. In addition to the committee members, several other Bureau of the Budget people attended the meetings. Among them was James Sundquist.
- Interview by author, Dr. L.B. Howard and Lt H.S. Bingham with Brig Gen B.E. Gates and Maj A.W. Wood, 14 Jan 44, in USAF HD 105.5-6.
- 47. The Second and Third Air Forces reported independently to Headquarters, AAF. On 10 September 1943 the First and Fourth Air Forces were removed from defense command jurisdiction and returned to the authority of the Commanding General, Army

- Air Forces. In case of an "invasion" emergency, they were to revert to command control. (AG 381 (6-24-43) OB-S-E-M, 10 Sep 43.)
- 48. James Sundquist, "Wartime Organization of the Army Air Forces" (3 August 1942), p. 26, in USAF HD 168.1-4.
- 49. That key air officers never took seriously the restricting of their mission to supply and training is indicated by the statement of the Chief of Air Staff on 10 June 1942 that the "main objective of the Army Air Forces is to operate effectively against the enemy the maximum number of organized units and airplanes possible." (Memo for all AAF units by Maj Gen M.F. Harmon, 10 Jun 42, in AAG 381, War Plans; Sundquist, "Wartime Organization of the Army Air Forces," p. 36.)
- 50. FM 100-20, Command and Employment of Air Power, 21 Jul 43. Another step of significance in the increased freedom of the AAF was the approval, in November 1943, of the elimination of all arms and services branch distinctions with the AAF and the creation of new functionalized organizations. A rather full discussion of the significance of the elimination of arms and services designations is given in USAF Historical Study 28 (Rev.), Development of Administrative Planning and Control in the AAF.
- 51. For a discussion of these steps, see USAF Historical Study 46, Organization of Military Aeronautics, 1935-1945: Executive, Congressional, and War Department Action.

#### CHAPTER II

- Unless otherwise indicated the discussion of internal organization has been based on James Sundquist, "Wartime Organization of the Army Air Forces" (3 August 1942), in USAF HD 168.1-4.
- See HQ OI 20-6, 6 May 43. The Chief of the Air Corps did not have an adjutant, his outer office was an "Executive."
- Memo for Exec, Plans Div by Capt J.M. Farrar, 21 May 41, in AFSHO files.
- This memo was drafted by Col Otto Nelson and is in the files of L.W. Hoelscher of the Bureau of the Budget. It is fully summarized in Sundquist, "Wartime Organization of the Army Air Forces," pp. 22-25.

#### CHAPTER III

- Memo for C/AC by Lt Col F.M. Andrews, Exec, Training and Operations Div, 2 Jun 30, in AAG 321.9, Training and Operations Div.
- Memo for C/AC by Maj J.C. McDonnell, 23 Oct 31, in AAG 321.9C, Orgn OCAC.
- 3. Ibid.
- 4. Memo for chiefs of all divisions by Brig Gen H.H.

- Arnold, Asst C/AC, 21 Aug 36, in AAG 321.9, Orgn OCAC.
- 5. R&R, RB [Lincoln] Plans to Exec, OCAC, 11 Mar 37, in AAG 321.9, Orgn OCAC.
- 6. These reports may be found in AAG 321.9, Plans.
- OCAC Memo 10-42, 2 May 40. General Yount was soon succeeded by Brig Gen Carl Spaatz.
- Memos for Exec, Plans Div, 21 and 26 May 41, in AFSHO files.
- 9. AAF Reg 20-1, 27 Jun 41.
- Memo for Brig Gen Carl Spaatz, C/AS, by Brig Gen M.F. Scanlon, 15 Sep 41, in AAG 321.9, Air Staff, AAF.
- 11. Ocac Memo 40-28, 22 Aug 41.
- 12. OCAC Memo 10-10B, 29 Aug 41. .
- R&R, S/AS to Exec, OCAC, 10 Sep 41, in AAG 321.9, Air Staff, AAF.
- Summary Report on the Administrative Div by Plans Sec, 1 Nov 41, in AAG 321.9, Orgn OCAC.
- Interview by author, Dr. L. V. Howard, and Lt H.S. Bingham with Brig Gen B.E. Gates and Maj A.W. Wood, 14 Jan 44, in USAF HD 105.5-6.
- 16. Summary Report by Wallace Clark and Company, 21 Nov 41, in AAG 321.9, Air Staff, AAF. Much stress was placed on the utility of the time-quantity, or Gantt, chart.
- Wallace Clark to Côl C.B. Lober, 7 Oct 43, in AFSHO files.
- 18. Interview by author and Lt H.S. Bingham with L.W. Hoelscher, 27 Jul 43, in USAF HD 105.5-6.
- James Sundquist, "Wartime Organization of the Army Air Forces" (3 August 1942), p. 29, in USAF HD 168.1-4.
- 20. Ibid., 31.
- 21. Memo for CG AAF by Lt Col J.S. Clark, Jr., 5 Feb 43, in AFSHO files.
- Sunquist, "Wartime Organization of the Army Air Forces," p. 32.
- 23. Notes used by Brig Gen L.S. Kuter in conference with AAF commanders, 6 Apr 42, in AFSHO files.
- Memo for CG 3d AF by Col J.Y. York, Jr., Exec, Air Staff, 12 Mar 42, in AAG 321.9, Orgn AAF.
- Memo for Lt Gen H.H. Arnold by Brig Gen L.S. Kuter, DC/AS, 30 Apr 42, in AAG 321.9, Orgn AAF.
- Memo for Dir of Military Requirements by Dir of War Orgn and Movement, 6 June 42, in AFSHO files.

#### CHAPTER IV

 OCAC Memo 10-10, 2 Jan 37. No complete statement of functions of the Supply Division for an earlier date is available.

- 1st ind (basic unknown), Col F.L. Martin, Exec, Materiel Div, to C/AC, 30 Nov 35, in AFSHO files.
- 3. Proceedings of a Board of Officers, 22 Jun 36, in AG 400 (4-6-36), sec 1.
- 4. AG 400 (10-24-36), Misc Div.
- Memo for C/AC by Col C.G. Hall, 9 Mar 37, in AAG 321.9, Orgn OCAC.
- Memo for Chief, Supply Div by Lt Col G.E. Brower,Mar 37, in USAF HD 145.93-66, Apr 36-Jan 39.
- 7. This document may be found in AAG 321.9.
- 8. R&R, No. 4, Plans to Exec, 7 Apr 39, in AAG 321.9.
- 9. OCAC Memo 10-10F, 19 May 39.
- 10. WD Press Release, 18 Sep 39.
- 11. OCAC Memo 10-10, 23 Nov 40.
- 12. OCAC Memo 10-10, 2 Jan 37.
- OCAC Memo 10-10C, 20 Jan 39; W.F. Craven and J.L. Cate, eds, The Army Air Forces in World War II, VI (Chicago, 1955), 430.
- Memo for all division chiefs by Exec, OCAC, 24
   Nov 41, in AAG 321.9, Training and Operations Div.
- Memo for C/AC by Acting C/AC, 20 Dec 40, in AAG 321.9, Orgn OCAC.
- AG 320.2 Air Corps (4-25-41) M-RET-M, 29 Apr 41.
- AAF Reg 20-4. The AG letter on this change was not issued until 6 November. (AG 320.2 (10-27-41) MR-M-AAF.)
- 18. Memo for Chief, AAF by Exec, OCAC, 17 Nov 41, in AAG 321.9, Orgn AAF.
- 19. AG 320.2 (12-9-41), 11 Dec 41.
- Memo for Acting DC/S for Air by Acting C/AC, 23
   Dec 41, in AAG 321.9A, Technical and Flying Training Comds.
- 21. AG 322.2 (1-14-42) MR-M-AAF/A1.
- 22. The Ferrying Command had been established on 29 May 41. (AG 320.2 (6-3-41), 5 Jun 41.)
- 23. He said this was especially true of Organizational Planning and Management Control, the latter of which should function as an efficiency expert. (Memo for DC/AS by Col W.W. Dick, AAG, 7 Jun 42, in AFSHO files.)
- 24. Ibid.
- Memo for DC/AS by Col B.E. Gates, 9 Jul 42, in AFSHO files.
- Memo for DC/AS by Lt Col H.W. Bowman (for Brig Gen M.S. Fairchild), 7 Jun 42, in AFSHO files.
- 27. AG 320.2 (4-30-42) MR-M-AAF.
- 28. AAF Reg 20-1, 16 Jun 42.
- 29. Hq AAF, GO 8, 20 Jun 42.
- 30. AG 320.2 (11-20-40) OB-1-AF-M, 21 Nov 42.

- 31. AG 320.2 (10-9-42) OB-1-AF-M, 13 Oct 42.
- 32. AG 320.2 (3-31-43) OB-1-AFDPU-M, 1 Apr 43.
- 33. AG 322 (8-23-43) OB-1-AFRPC-M, 24 Aug 43.
- 34. AG 322 (9-27-43) OB-1-AFRPG-M, 29 Sep 43.
- 35. AAF Reg 20-26, 1 Oct 43. The Office of the Chief, Flying Safety and a Deputy Chief, Flying Safety, together with a major portion of the Flying Safety organization, operated from Winston-Salem.
- 36. AAF Reg 20-23A, 11 Dec 43.
- 37. Teletype from C/AS to CG Flying Training Comd, 13 Mar 43, in AFDMC files.
- 38. R&R, Maj Gen G.E. Stratemeyer to Brig Gen B.E. Gates, 3 Jul 43, in AFDMC files.
- AG Memo W95-18-43, 7 Jul 43; AG 322 (7-7-43)
   OB-I-AFDMC-MP-H; AAF Memo 20-5, 7 Jul 43.
- James Sundquist, "Wartime Organization of the Army Air Forces" (3 August 1942), p. 44 in USAF HD 168.1-4.

#### CHAPTER V

- 1. AAF Reg 20-5, 24 Apr 42.
- 2. AAF Reg 20-1, 19 Jun 42.
- WD Circular No. 59 provided for the submission of recommendations to the Deputy Chief of Staff, WDGS, at the end of three months. It was in pursuance of this provision that the comments were channeled through the Deputy Chief of Air Staff.
- Memo for C/AS by Brig Gen T.J. Hanley, Jr., AC/AS, A-4, 6 Jun 42.
- Memo for DC/AS by Col H.S. Vandenberg, AC/AS, A-3, 6 Jun 42.
- Memo for C/AS by Col H.A. Craig, AC/AS, Plans n.d. An almost identical memo was written by Col H.S. Vandenberg on 25 Jun 42.
- 7. Memo for CG AAF by CG AFTTC, 7 Jul 42. The Commanding General, AFTTC thought a first principle of sound organization should be the delegation of the greatest possible amount of responsibility to the lower echelons of command. The remaining duties should be given to the higher echelons. Instead, the process had always been the opposite. "It is this failure to surrender power by decentralization and to confine the efforts of each headquarters to a definite bracket of responsibility that prevents proper planning and sound directives being issued by subordinate headquarters." Also, it was felt that the methods and practices of Headquarters, AAF were too similar to those employed when the air force consisted of "only a few thousand men and officers."
- Brig Gen Carlyle Wash quoted in R&R, C/AS to AFDMC, 7 Jul 42.
- 9. Memo for C/AS by Lt. Col Ivor Massey, 4 Jul 42.

- Maj Gen H.R. Harmon to Maj Gen G.E. Stratemeyer, 23 Jun 42.
- 11. Memo for DC/AS by Lt Col H.W. Bowman (for Brig Gen M.S. Fairchild), AFDMR, 7 Jun 42.
- 12. Interview by author, Dr. L.V. Howard, and Lt H.S. Brigham with Brig Gen B.E. Gates and Maj A.W. Wood, 14 Jan 44 in USAF HD 105.5-6. General Gates pointed out that changes were so rapid that some decisions had to be reversed almost before they were made.
- Memo for DC/AS by Lt Col H.W. Bowman (for Brig Gen M.S. Fairchild), AFDMR, 7 Jun 42.
- 14. R&R. Dir of Personnel to DC/AS, 23 Jun 42.
- R&R, Dir of Bombardment to AFDMR, 6 Jun 42;
   Brig Gen Carlyle Wash quoted in R&R, C/AS to AFDMC, 7 Jul 42.
- 16. Brief (by Organizational Planning) of comments from various activities on the organization of the AAF, 21 Jul 41. The Gulf Coast Training Center, in telegram of 7 Jul 42, wanted to know who was responsible for certain activities.
- 17. Memo for CG AAF by CG AFTTC, 7 Jul 42.
- 18. The primary purpose of this study had been the discovery of "duplication of effort and the causes of the issuance of conflicting orders or instructions which at times have been received in the field."
- 19. The proposal to combine the Directorate of Organizational Planning with Management Control is not quite clear. Perhaps it was intended that the personnel of the operating directorate (Organizational Planning) should become an integral rather than a subsidiary part of the administrative directorate (Management Control). Report of Col B.M. McFayden, IGD, to the Inspector General, 2 Jul 42, in AFSHO files.
- Memo for DC/AC by Col B.E. Gates, 9 Jul 42, in AFSHO files.
- 21. Brief of comments of officers in conference called by C/AS for purpose of discussing the organization of Headquarters, AAF, in AFSHO files. In this last comment probably lies much of the difficulty of bringing about more efficiency through more effective reorganization.
- 22. Colonel Aston stated that it was not possible to abolish the directorates in July 1942 because it took time to "persuade the 'powers' that this was not the best organization to carry on with the fulfillment of the mission of the AAF." Interview with Col J.W. Aston, 18 Jan 44, in AFSHO files.
- 23. Flying Safety was soon returned to its former status of a directorate.
- 24. AAF Reg 20-1, 1 Jan 43.
- Interview by author and Miss Jackson with Lt Col J.S. Clark, Organizational Planning, 15 Apr 43, in USAF HD 105.5-6.

- Memo for CG AAF by Lt Col J.S. Clark, 5 Feb 43, in AFSHO files.
- 27. General Gates described this reorganization a little differently. He intimated that it was really the A-staff that was abolished, for the directorates had been "running the show." Instead of the directorates being placed under the "A's," he said the A-staff was "sucked down" into the directorates. Gates interview.
- 28. Brig Gen Gordon Saville, the aggressive head of Air Defense, was primarily responsible for the combining of the many functions under this new staff office. Clark interview.
- Memo to Maj Gen O.P. Echols et al. by C/AS, 25 Mar 43, in AFDMC files.
- 30. Hq OI 20-13, 18 Aug 43.
- 31. Hq OI 20-14, 14 Aug 43.
- 32. Hq OI 20-15, 2 Sep 43.
- 33. AAF Reg 20-23, 1 Oct 43.
- 34. Hq OI 20-9, 11 Dec 43.

#### CHAPTER VI

- 1. 1st ind (basic unknown), OCAC to CO Langley Field, 9 Apr 28, in AAG 321.9, Orgn Inspection Div.
- 2. This step, suggested 10 years earlier, was taken after the War Department had expressed the feeling that there were too many divisions in the OCAC. (Memo for Exec by Lt Col G.E. Brower, Acting Chief, Supply Div, 20 Aug 39, in AAG 321.9, Orgn Inspection Div.)
- 3. For details on certain aspects of inspection, see same file and "a plan for expansion of AAF inspection activities," 24 Aug 42, as well as other papers in AFMOP files. Although he did not think it essential, Col J.W. Aston thought it "might be good if Management Control took over administrative inspection." (Interview by author, Dr. L.V. Howard and Lt H.S. Bingham with Col J.W. Aston, 18 Jan 44 in USAF Hd 105.5-6.)
- 4. Organization Chart, 30 Apr 41.
- The flight records of the Inspection Division might, in some measure, be considered control devices. The most significant records, at that time, were those maintained at Wright Field by the Materiel Division.
- Memo for Exec, Plans Div by Capt J.M. Farrar, 21 May 41, in AFSHO files.
- 7. The offices of the statistics sections of the Air Staff and OCAC were adjacent; each was compiling its own material, but would occasionally "borrow" from the other office material which would then become a part of its own figures.
- 8. OCAC Memo 10-100, 24 Dec 41.
- The Plans Section, OCAC had been charged with many of these duties on 29 August 1941. (OCAC Memo 10-10B.) General Gates stated that his con-

- cept of administrative planning was the same when he was head of the Plans Section, Assistant Executive for Administrative Planning and Coordination, and Chief of Management Control. (Interview with Brig Gen B.E. Gates and Maj A.W. Wood, 14 Jan 44.)
- James Sundquist, "Wartime Organization of the Army Air Forces" (3 August 1942), p. 21, in USAF HD 168.1-4.
- 11. Memo for C/AC by Col W.F. Pearson, 22 Jan 42, in AAG 321.9, Orgn OCAC.
- 12. General Gates felt that the one great value of the Clark report was that it made the War Department realize the necessity of standardization, a point which he had stressed for some time. (Gates interview.)
- 13. Memo for Col M.S. Fairchild by Capt J.M. Farrar, 26 Jul 41, in AAG 321.9, Orgn AAF.
- Air Corps Policy 5-1, 19 Jan 42, in AAG 360.01, Air Corps Policies.
- Statement of Functions, 6 Mar 42, p. 40; Sundquist, "Wartime Organization of the Army Air Forces," pp. 24-25.
- 16. Statement of Functions, 6 Mar 42, p. 43.
- 17. Sundquist, "Wartime Organization of the Army Air Forces," p. 33. There was some feeling, in late 1943, that it would be a natural, though not necessary, step for Management Control to assume supervision of the budget and fiscal functions. (Aston interview.)
- Memo for DC/AS by Col B.E. Gates, 9 Jul 42, in AFSHO files.
- 19. Hq OI 20-13, 18 Aug 43.
- 20. A proposal of late 1943 recommended the consolidation of the Manpower and Organizational Planning Divisions. The recommendation was justified on the grounds that such a move would "integrate" organizational and manpower policies, activities, studies, and staff within AFDMC. No action was taken. (Memo for Chief, AFDMC by Chief, AFMOP, 4 Nov 43, in AAG 310.1, Management Control.)
- Memo for DC/AS by Brig Gen B.E. Gates, 24 Nov 44, in Postwar Plans Div files, AC/AS-5, Orgn of Hq AAF.
- 22. Memo for C/AS by AFDMC, 25 Nov 44, in AAG 310.1, Office Administration and Orgn.
- 23. Hq OI 20-91 and 20-93, 27 and 28 Jun 45. The latter transfer was to be effective on 1 Jul 45. The Air Adjutant General and the Secretary of Air Staff had been consolidated on 8 May 1944 under the latter. It was not until 15 Sep 45 that the AAG was again given the functions of the official channel of AAF communications. (Hq OI 20-41, 8 May 44, and AAF Reg 20-1, 15 Sep 45.)
- 24. Hq OI 20-95, 28 Jun 45; 20-97, 5 Jul 45; 20-1 and 20-107, 23 and 25 Aug 45.

- 25. Donald C. Stone, Assistant Director for Administrative Management, Bureau of the Budget, wrote on 10 Mar 42: "We commend most heartily the provision within the new organization plan for facilities under the Director of Management Control which, acting by your direction and within the guidance of the Chief of Air Staff, can give sustained attention to installing the plan." (Memo for Lt Gen H.H. Arnold, in AAG 310.1, Budget and Fiscal Office.)
- 26. R&R, Acting C/AC to Asst for Procurement Services, 27 Dec 41, in Bureau of the Budget files.
- Interview by author with John S. Canterbury and Arnold Miles, 18 Oct 43, in USAF HD 105.5-6.
- Memo for Donald Stone by staff on status reporting and program planning and scheduling, 10 Feb 42, in Bureau of the Budget files.
- Summary examples of existing lacks pertaining to over-all programming and scheduling, J.L. Jacobs, 27 Apr 42, in Bureau of the Budget files.
- Sundquist, "Wartime Organization of the Army Air Forces," p. 34.
- 31. Interview with Canterbury and Miles.
- Sundquist, "Wartime Organization of the Army Air Forces," p. 35.
- 33. AAF Reg 20-10, 8 Jun 42.
- Memo for L.W. Hoelscher by Arnold Miles and J.L. Sundquist, 16 Jun 42, in Bureau of the Budget files.
- Memo for DC/AS by Col B.E. Gates, 9 Jul 42; memo for CG AAF by Col B.E. Gates, 5 Feb 43, in AFSHO files.
- Memo for Col B.E. Gates by Lt Col J.S. Clark, Jr.,
   Jun 43, in AFSHO files.
- 37. In Bureau of the Budget files.
- Organization chart for DC/AS, Plans and Programs [about 1 Aug 43], in AFMOP files.
- 39. Aston interview.
- 40. Hq OI 20-29, 13 Dec 43.
- Memo for Maj Gen H.A. Craig by E.P. Learned, 27 May 44, and R&R, No. 3, Brig Gen Donald Wilson, DC/AS to C/AS, 20 Jun 44, in Postwar Plans Div files, AC/AS-5, Special Advisor for Program Control.
- 42. Comment 4 (R&R, AC/AS, OC&R to C/AS, 25 Jun 44) and notation thereon by C/AS, 27 Jun 44, in file cited in n. 43.
- 43. Hq OI 20-1, 23 Aug 45. Learned continued to head the office until 1 Sep 45 when he was reassigned on a part-time basis as a special consultant to the Commanding General, AAF. (Hq OI 20-29, 1 Sep 45.)
- 44. Hq OI 20-110.

#### CHAPTER VII

- R&R, AC/AS, OC&R to AC/AS, MM&D (thru ACO), 22 Jul 44, in Postwar Plans Div files, AC/AS-5, Special Advisor for Program Control.
- Comment 2 (R&R in n. 1), ACO to AC/AS, M&S, 9 Aug 44.
- Memo for Gen H.H. Arnold by Gen G.C. Marshall, 26 Jul 44, in AAG 360.2, Development and Research; John D. Millett, The Organization and Role of the Army Service Forces, U.S. Army in World War II (Washington, 1954), p. 128.
- Memo for C/S by CG AAF, 28 Jul 44, in AFMOP files.
- 5. WDCSA 413.44 (10 Aug 44), 26 Aug 44.
- 6. AG PO-A 334 (31 Aug 44).
- OCSigO to CO Dayton Signal Corps Publishing Agency, 2 Oct 44, and memo for C/AS by Brig Gen P.W. Timberlake, 16 Dec 44, in AFMOP files. See also AAF Reg 20-46, 2 Oct 44; WD Circular 429, 3 Nov 44; Hq OI 20-75 and 100-1, 4 Dec and 17 Mar 44; AG 413.44 (21 Oct 44) OB-S-WDGDS. For the final details of transfer, see Signal Transfer in ACO files.
- 8. AR 95-150, 24 Apr 43. In the theaters of operations, however, the theater commander (with technical instruction from the Commanding General, AAF) was charged with the administration; operation, and maintenance of an adequate weather service for the AAF units under his command.
- AR 95-150, 15 May 45. The making of upper air observations for the specific purpose of determining ballistics for artillery fire was reserved as a function of the artillery.
- R&R, Lt Col S.S. Mullin to Procurement, Air Services, Materiel, and Resources Divs of AC/AS, M&S,
   Jun 45, in AFDCO files; Daily Activity Report of AFDMC, 3 Mar 45.
- R&R, AFOCR to AFAMS (thru AFMOP), 14 May 45, and telg, AFAMS to ATSC, 6 Jun 45, in AFDCO files.
- 12. Telg, ATSC to AFAMS, n.d., in AFDCO files.
- 13. Memo for Maj Gen E.M. Powers (thru Col C.H. Dyson) by Lt Col S.S. Mullin, 15 Jun 45, in AFDCO files. Mullin noted that the Ground Forces appeared to object to the AAF taking over responsibility for any other than equipment peculiar to the AAF.
- 14. R&R, AFDCO to Materiel Div, AFAMS, 5 Jul 45; memo for Maj Gen E.M. Powers (thru Col C.H. Dyson) by Lt Col S.S. Mullin, 12 Jul 45, in AFDCO files. The meeting was attended by representatives of ATSC, ACO, OC&R, M&S, and Manpower.
- Memo for C/S (attn G-4) by AC/AS-4, 17 Sep 45, in AFDCO files.
- 16. Ibid.

- 17. This was accomplished by Change 13 to AR 170-10, 11 Sep 44 and WD Circular No. 388, 27 Sep 44. (For a discussion of these, see USAF Historical Study 28 (Rev.), Development of Administrative Planning and Control in the AAF.
- 18. "History of Crash Rescue and Fire Fighting under the Direction of the Army Air Forces," 19 Sep 45, in USAF HD 144-04-1. On 15 December the transfor of procurement responsibilities for crash rescue boats was proposed.
- 19. WD Circular No. 36.
- This repair and utilities function of the Engineers had been previously modified by Change 8 to AR 95-100, 29 Mar 44, and WD Circular No. 388, 27 Sep 44.
- ASF Circular No. 85, 9 Mar 45; Chief of Engineers to CG VIII Service Command, 14 May 45, in AFDCO files.
- R&R, C/AS to Special Asst for Antiaircraft, 14 Feb 45, and memo for CG AAF by Maj Gen H.R. Oldfield, 15 Feb 45, in AAG 321, Artillery.
- Study by AC/AS, Plans, 7 Jul 45, in AAG 381, War Plans "Miscellaneous" National Defense. See also, History of 4th Antiaircraft Comd, 9 Jan 42-1 Jul 45, in USAF HD 456.01.
- Memo for C/S by CG AAF, 4 Aug 45, in AAG 381, War Plans etc.

#### CHAPTER VIII

- Memo for C/S by CG AAF [prior to 25 Oct 44] in Historical file, Hq CAF. A proposal had been made in Feb 43 to create a continental air force, but the move seems to have been prompted by a desire to withdraw the First and Fourth Air Forces from the Eastern and Western Defense Commands. The new agency would have absorbed all AAF Zone of Interior responsibility for unit training, air force participation in joint air-ground training and maneuvers, and continental air force combat operations. All other nonheadquarters AAF activities were to be concentrated under the Directorate of Individual Training and the service commands. (Memo for Brig Gen G.P. Saville by Col W.F. McKee, 23 Feb 43 in AAG 321, Continental Air Force.)
- Memo for CG AAF by Lt Gen T.T. Handy, 25 Oct 44, in Historical file, Hq CAF. General Handy recalled that relationships had not always been smooth when Headquarters, AFCC had been located at Bolling Field.
- Memo for DC/S by CG AAF, 28 Oct 44, with notation of approval by Brig Gen O.L. Nelson, Asst DC/S, 17 Nov 44, in Historical file, Hq CAF.
- 4. AG 322 (12 Dec 44) OB-I-AFRPG-M, 13 Dec 44; AAF Ltr (C) 20-9, 16 Dec 44. AAF Letter 50-83 of 26 Dec 44 changed responsibilities slightly by assigning ATSC the responsibility for organizing and

- training air service groups from activation to combined training when they came under the elements of the CAF.
- 5. The Acting Commanding General, CAF had recommended that the date be changed to 1 Jul; the Chief of Air Staff moved it up to 1 Apr. (Memo for C/AS by Brig Gen E.H. Beebe, 15 Jan 45, and notation thereon, in Historical file, Hq CAF.)
- 6. See Hq OI 20-30, 8 May 45 and AAF Reg 20-1, 1 Jun 45. The organization of Headquarters, CAF was originally planned along the three-directorate line, but it quickly veered to the classical staff lines. A sixth assistant chief of staff, for communications and electronics, was soon added. See Organization Charts of 19 Jan 45 and later dates in Historical file, Hq CAF.
- 7. The two major components of the Center were the School and the Demonstration Air Force. The Center, Proving Ground, and Board had been in existence for some time under slightly different names and with somewhat different interrelationships. On 8 Oct 43 the AAF Board became an agency of Headquarters, AAF and was stated to be the agency by which the Commanding General, AAF "develops tactics, techniques, and doctrines and determines all military requirements for the Army Air Forces." (See AAF Reg 20-14, 12 Nov 42; AAF Reg 20-20, 2 Jul and 8 Oct 43; USAF Historical Study 13, The Development of Tactical Doctrines at AAFSAT and AAFTAC, pp. 29-33.)
- 8. USAFHS-13, p. 33; statement of Maj J.H. Harris, 10 Oct 45, in AFSHO files.
- Memo for Brig Gen D.C. Wilson, AC/AS, OC&R by Brig Gen E.L. Eubank, 13 Jan 45, in AAF Center Liaison Office.
- 10. C/AS to CG AAFTAC, 20 Feb 45, in AAF Center Liaison Office. The chief of Air Staff closed his letter with, "Tell me what you think and don't pull the punches."
- 11. Maj Gen E.J. House to Lt Gen B.M. Giles, 1 Mar 45, in AAF Center Liaison Office. General House said that the Chief, AFDMC, the Acting AC/AS, OC&R, and the present commandant of the AAF School of Applied Tactics seemed agreeable to the suggested changes.
- Memo for C/AS by Brig Gen B.E.Gates, 13 Mar 45, in Postwar Plans Div files, "AAF Center."
- 13. Memo for C/AS by AFDMC, 11 Apr 45, in Postwar Plans Div files, "AAF Center"; statement of Maj J.H. Harris, 10 Oct 45. The school was to be organized into four main fields of instruction: staff and command, personnel and administration, tactics and operations, and logistics.
- Memo for record by Col R.E.S. Deichler, in AAF Center Liaison Office.
- 15. The Demonstration Air Force remained temporarily

- at Orlando but was to move to Eglin when facilities were made available.
- 16. See AAF Regs 20-1, -14, -15, -16, and -17 of 1 Jun 45.
- 17. The AAF Center Liaison Office was established in the OAC/AS-3 by Hq O.I. 80-51 of 25 Aug 45.
- For a fuller discussion of the consolidation of these commands, see USAF Historical Study 28 (Rev.), Development of Administrative Planning and Control in the AAF.
- Memo for C/AS by AFDMC, 16 Sep 42, in AFSHO files.
- Memo for Brig Gen E.S. Perrin by Lt Col R.E.S. Deichler, 4 Apr 44, in AFMOP files.
- 21. Memo for CG AAF by Maj Gen W.H. Frank, 16 May 44, in AFMOP files. The approval of this proposal would have added another assistant chief of air staff, would have violated the principle of functional consolidation, and would have been moving in a direction contrary to the three-deputy plan extending from the bases through Headquarters, which had been approved by General Arnold for the postwar air force.
- 22. Charts 3, 6, 7, 8, and 9 in AFMOP files. These charts are in a series of about 30 prepared by Organizational Planning to promote its ideas on the consolidation of the two commands.
- 23. Memo for Brig Gen B.E. Gates by R.A. Lovett, 1 Jun 44,, in AFMOP files.
- Memo for Gen H.H. Arnold, 3 Jul 44, in AFMOP files.
- 25. R&R, CG AAF to Lt Gen B.M. Giles, 7 Jul 44, in AFMOP files. General Knudsen was to be assisted by a deputy, Maj Gen B.E. Myers, and by Brig Gen K.B. Wolfe and Maj Gen Delmar Dunton, who were to head the Materiel and Air Service Commands, respectively.
- AG 322 (7-14-44) OB-I-AFRPG-M, 14 Jul 44, subj: Establishment of AAF Materiel and Services; AAF Reg 20-43, 17 Jul 44; Hq AAF, GO 10, 17 Jul 44.
- 27. AG 323.3 (8-30-44) OB-I-AFRPG-M, 31 Aug 44; AAF Reg 20-43, 31 Aug 44; Hq AAF, GO 12, 31 Aug 44.

#### CHAPTER IX

- AAF Memo 20-11, 20-13, and 20-16, 2 Sep, 1 Oct, and 3 Nov 43; Hq OI 20-19, 20-76, and 20-78, 13 Dec 43, 1 Dec 44, and 19 Dec 44.
- Memo for AFDMC by AC/AS, M&S, 29 Aug 44, in AAG 310.1, Office Adm and Orgn.
- Hq OI 20-3 and 20-4, 31 Aug 44; 20-3, 14 Sep 44; 20-98, 9 Jul 45. MM&D had been redesignated M&S by AAF Reg No. 20-43, 17 July 1944.
- Hq OI 20-5 and 20-66, 6 Jun and 1 Nov 44. A Radio Division was added in January 1945. (Hq OI 20-82

- and 20-66, 23 and 26 Jan 45.) The Motion Picture Office was moved from AC/AS, OC&R to AC/AS, Intelligence and redesignated the Motion Picture Services Division by Hq OI 20-10 of 14 Aug 44. In the summer of 1945 it was attached to the OC/AS.
- 5. Hq OI 20-17, 26 Jun 44. There were some other new offices in Headquarters during 1944—such as the Air Installations Division—which caused difficulty in the delimiation of functions, but they had little effect on the total organization picture. (Hq OI 20-51, 12 Jun 44; 20-24, 24 Oct 44; 20-51, 20 Feb 45.) The superimposition of Headquarters, Twentieth Air Force on AAF Headquarters in April 1944 added to the burden of staff members and perhaps created a tendency to neglect the more prosaic responsibilities of the AAF as a whole in order to devote energies to the activities of the B-29's. (AG 322 (4-4-44) OB-I-AFRPG-M.)
- Memo for C/AS by CG AAF, 30 Oct 44, in AAG 321, AAF.
- R&R, DC/AS, to AC/AS, OC&R, 6 Nov 44, in AAG 321, AAF. A fourth deputy chief had been added in June 1944.
- Memo for C/AS by AC/AS, OC&R, 25 Nov 44, in AAG 310.1, Office Adm and Orgn.
- Memo for C/AS by Chief, AFDMC, 25 Nov 44, in AAG 310.1 Office Adm and Orgn.
- Memo for all offices of Air Staff by C/AS, 4 Dec
   in Postwar Plans Div files.
- 11. AAF Reg 20-58, 1 Jul 45. In May 44 the Army Airways Communications System had been reorganized on a command basis, and on 1 Jun 44 the AAF Redistribution Center had become the AAF Personnel Distribution Command. (See AACS History, III, pp. 947-51; AAG Reg 20-40, 1 Jun 44; chart, Organization of AAF, 1 Jun 45.)
- 12. Chart, Organization of AAF, 23 Aug 45, attached to HQ O.I. 20-1, same date; statement of Lt Col J.O. Wright, Exec Asst, OC/AS, 24 Sep 45, in AFSHO files. The office of Special Projects ceased to exist on 15 Sep 45 when its functions were distributed to AC/AS-1, -4, and -5. (Hq OI 20-109, 5 Sep 45.) By the 15 Sep chart, the former Historical Division was called the AAF Historical Office, under the Secretary of Air Staff.
- See, e.g., memo for Lt Gen H.S. Vandenberg by AC/AS-3, 23 Jul 45, in AAG 321.
- 14. Statement of Lt Col J.O. Wright, in AFSHO files.
- 15. Hq OI 20-1, 23 Aug 45.
- Directive, Acting C/AS to Asst Chiefs of Air Staff,
   Aug 45, in OCAS files. Sources in notes 17-21 in same files.
- 17. R&R, C/AS to various Hq offices, 27 Aug 45.
- 18. Memo for C/AS by AC/AS-1, n.d.

- R&R, AC/AS-3 to C/AS, 31 Aug 45, and Comment 2, AC/AS-3 to C/AS, 5 Sep 45.
- R&R, Comment 2, AC/AS-4 to C/AS, 1 and 13 Sep 45.
- 21. This proposal was crossed out and marked "Specifically disapproved by Gen Chauncey, 14 Sep 45 JOW." (R&R, Comment 2, AC/AS-5 to C/AS, 14 Sep 45, and buckslip thereon.)
- Hq OI 20-1, 15 Sep 45. See chart, Organization of AAF, 15 Sep 45.
- 23. See AAG 321, AAF.
- 24. Connected with this problem was the one of de-

- termining size and composition of the Interim Air Force—between the defeat of Japan and the establishment of the permanent postwar organization. See AAF 321, Interim Air Force.
- 25. See AAG 321, AAF.
- Memo for CG AAF by Maj Gen S.E. Anderson, 20 Jun 45, in AAG, 321, AAF.
- 1st ind (to memo, n. 26), Lt Gen H.S. Vandenberg to CG CAF, 29 Jun 45, and 2d ind, Hq CAF to CG AAF, 30 Jun 45. See also AAG 321, CAF.
- Chaplain and medical personnel would be in addition to these three branches. Daily Activity Report of AC/AS-3, 6 Nov 45.

## Bibliography

#### Official Documents

AAF Memorandums 20- series

AAF Regulations 20- series

AR 95-5 series

AR 170-10 series

ASF Circular No. 85, 9 March 1945

Final Report of War Department Special Committee [Baker Board] on Army Air Corps, July 18, 1934

FM 100-20, 20 July 1943

Headquarters Office Instructions (AAF) 20- and 80- series

Hg. AAF, General Orders No. 8, 20 June 1942; No. 11, 26 March 1941

Office, Chief of the Air Corps Memos 10-10 series

Organization Chart Book (AAF), 30 April 1941, September 1941, 25 January 1943, 29 March 1943, and monthly from 1 October 1943 to 1 June 1945

Report of Joint Chiefs of Staff Special Committee for Reorganization, April 1945

Statement of Functions, (AAF), 6 March 1942

WD Circular No. 59, 2 March 1942; No. 388, 27 September 1944; No. 429, 13 November 1944; No. 36, 30 January 1945

#### Histories

History of Crash Rescue and Fire Fighting under the Direction of the Army Air Forces. 19 September 1945

History of 4th Antiaircraft Command. 9 January 1944

Sundquist, James. Draft study (copy) "Wartime Organization of the Army Air Forces." 3 August 1942

USAF Historical Study 13, The Development of Tactical Doctrines at AAFSAT and AAFTAC. July 1944

USAF Historical Study 28 (Rev.), Development of Administrative Planning and Control in the AAF. August 1946

### Notes, Statements, and Interviews

Aston, Col. J.W. Interview by author, Dr. L.V. Howard, and Lt. H.S. Bingham, 18 January 1944

Canterbury, John S. and Miles, Arnold. Interview by author, 18 Actober 1943

Clark, Col. J.S. Interview by author and Miss Jackson, 15 April 1943

Comments by Headquarters and field offices on the 9 March 1942 organization of the Army Air Forces

Gates, Brig. Gen. B.E. and Wood, Maj. A.W. Interview by author, Dr. L.V. Howard, and Lt. H.S. Bingham, 14 January 1944

Harris, Maj. J.H. Statement, 10 October 1945

Hoelscher, Leonard W. Interview by author and Lt. H.S. Bingham, 27 July 1943

Kuter, Brig. Gen. L.S. Notes used in conference with Army Air Forces commanders, 6 April 1942

McFayden, Col. B.M. Report to the Inspector General, 2 July 1942

Miscellaneous Press Releases

Wright, Lt. Col. J.O. Statement, 24 September 1945

## **Files**

AC/AS-3, AAF Center Liaison Office files
AC/AS-4, Deputy for Plans and Administration office files
AC/AS-5, Postwar Plans Division office files
Adjutant General Central Files (cited AG)
Air Adjutant General Central Files (cited AAG)
Bureau of the Budget office files
Chief of Air Staff office files
Continental Air Force, Historical File
Office of Management Control and Organizational Planning Division files

## Newspaper

Washington Post, 1 October 1943

## **Appendix**

## Roster of Key Personnel To September 1955

COMMANDING GENERAL, GHQ AIR

FORCE (Air Force Combat

Command after 20 Jun 41)

Maj Gen F.M. Andrews

1 Mar 35—1 Mar 39

Lt Gen D.C. Emmons

1 March 39—17 Dec 41

Maj Gen M.F. Harmon (acting)

17 Dec 41—26 Jan 42

Maj Gen C. Spaatz

27 Jan 42-8 Mar 42

CHIEF OF THE AIR CORPS

Maj Gen B.D. Foulois

19 Dec 31-22 Dec 35

Maj Gen O. Westover

22 Dec 35-21 Sep 38

Maj Gen H.H. Arnold

22 Sep 38—30 May 41

Maj Gen G.H. Brett

30 May 41—8 Dec 41

(Served as Acting Chief

from 25 Oct 40—30 May 41)

Maj Gen W.R. Weaver (acting)

8 Dec 41-9 Mar 42

ASST. CHIEF OF THE AIR CORPS

Brig Gen O. Westover

22 Dec 31—22 Dec 35

Brig Gen H.H. Arnold

24 Dec 35—22 Sep 38

Brig Gen W.G. Kilner

29 Sep 38-6 Aug 39

Brig Gen J.E. Fickel

1 Dec 39-2 Oct 40

Brig Gen D. Johnson

2 Oct 40-8 Aug 41

Brig Gen M.S. Fairchild

8 Aug 41—9 Mar 42

CHIEF, ARMY AIR FORCES

Maj-Lt Gen H.H. Arnold

20 Jun 41--9 Mar 42

COMMANDING GENERAL, ARMY AIR FORCES

Lt Gen-General of the

Army H.H. Arnold

9 Mar 42-

CHIEF OF AIR STAFF

Brig Gen C. Spaatz

20 Jun 41-26 Jan 42

Mai Gen M.F. Harmon

27 Jan 42—6 Jul 42

Maj Gen G.E. Stratemeyer

6 Jul 42-26 Jul 43

Maj Gen B.M. Giles

26 Jul 43—30 Apr 45

(also Deputy Commander, AAF)

Lt Gen I.C. Eaker

30 Apr 45—2 Jun 45

(Deputy Commander only after

latter date)

Maj Gen C.C. Chauncey (acting)

2 Jun 45-

DEPUTY CHIEFS OF AIR STAFF\*

Brig Gen L.S. Kuter

9 Mar 42—17 Oct 42

Brig Gen T.J. Hanley, Jr.

17 Oct 42-25 Jun 43

Brig Gen E.S. Perrin

25 Jun 43-29 Apr 44

Brig Gen W.E. Hall

29 Mar 43—4 Sep 44

Brig Gen L.G. Saunders

29 Mar 43-25 Aug 43

Brig Gen H.S. Vandenberg

25 Aug 43—15 Mar 44

Brig Gen P.W. Timberlake

29 Apr 44—3 Jul 45

Brig Gen D. Wilson

10 May 44-2 Sep 44

Brig Gen R.O. Owens

3 Jul 44---15 May 45

<sup>\*</sup>From 29 Mar 43 to 1 Jun 44 there were three deputy chiefs; for a short while after Jun 44 there were four deputy chiefs, and after the Aug 45 reorganization there was only one.

Brig-Maj Gen L. Norstad 20 Aug 44—8 May 45 Brig Gen F.H. Smith 2 Sep 44—15 Jan 45 Brig Gen R.C. Hood 18 Jan 45—

CHIEF, PLANS, AC/AS, PLANS
Lt Col-Col H.L. George
20 Jun 41—9 Mar 42
Col H.A. Craig
9 Mar 42—18 Jul 42
Col-Brig Gen O.A. Anderson
18 Jul 42—8 Jul 43
Brig Gen L.S. Kuter
8 Jul 43—8 May 45
Brig Gen J.L. Loutzenheiser
(acting)
8 May 45—27 Jun 45
Maj Gen L.S. Norstad

A-1; AC/AS, PERSONNEL
Brig Gen R.P. Cousins
7 Jul 41—12 Jan 42
Col F.T. Davison
12 Jan 42—29 Mar 43
Brig Gen J.M. Bevans
29 Mar 43—20 Feb 45
Maj Gen H.R. Harmon
20 Feb 45—7 Jun 45
Maj Gen F.L. Anderson
7 Jun 45—

27 Jun 45-

A-2; AC/AS, AIR INTELLIGENCE Brig Gen M.F. Scanlon 20 Jun 41-21 Feb 42 Col R.L. Walsh 21 Feb 42-30 May 42 Brig Gen H. Peabody 30 May 42—22 Jun 42 Col-Brig Gen E.P. Sorensen 22 Jun 42-21 Oct 43 Maj Gen C.L. Bissell 21 Oct 43-5 Jan 44 Brig Gen T.D. White 5 Jan 44-2 Sep 44 Maj Gen J.P. Hodges 2 Sep 44-7 Jul 45 Maj Gen E. Quesada 7 Jul 45A-3; AC/AS, TRAINING
Col-Brig Gen E.L. Naiden
20 Jun 41—27 Jan 42
Col H.S. Vandenberg
27 Jan 42—12 Aug 42
Col-Maj Gen R.W. Harper
12 Aug 42—20 Sep 44
Brig Gen W.W. Welsh
20 Sep 44—16 Jul 45
Lt Gen H.S. Vandenberg
16 Jul 45—
A-4; AC/AS, MATERIAL, MAINTENANCE,
AND DISTRIBUTION: AC/AS MATERIE
AND SERVICES
Lt Col E.P. Sorensen
20 Jun 41—4 Jan 42

AND DISTRIBUTION: AC/AS MATERIEL
AND SERVICES
Lt Col E.P. Sorensen
20 Jun 41—4 Jan 42
Col T.J. Hanley, Jr.
4 Jan 42—17 Oct 42
Col R.H. Ballard
17 Oct 42—29 Mar 43
Maj Gen O.P. Echols
29 Mar 43—27 Apr 45
Maj Gen E.M. Powers (acting)
27 Apr 45—

AC/AS, OPERATIONS, COMMITMENTS, AND REQUIREMENTS.

Maj Gen B.M. Giles

29 Mar 43—26 Jul 43

Brig Gen H.M. McClelland (acting)

26 Jul 43—11 Aug 43

Brig-Maj Gen H.A. Craig

11 Aug 43—25 Oct 44

Brig-Maj Gen D. Wilson

25 Oct 44—25 Jun 45

Lt Gen H.S. Vandenberg

AC/AS PROGRAM PLANNING Col A.L. Moore 8 Jun 42—29 Mar 43

CHIEF, PLANS SECTION, OCAC; ASST EXEC FOR ADMINISTRATIVE PLANNING AND COORDINATION, OCAC; DIRECTOR, MANAGEMENT CONTROL; AC/AS, MANAGEMENT CONTROL

Lt Col-Brig Gen B.E. Gates
20 Jun 41—25 Jun 45
Col R.E.S. Deichler (acting)
25 Jun 45—

26 Jun 45 (AC/AS-3 on 16 Jul 45)

AIR INSPECTOR Brig Gen H.A. Dargue 20 Jun 41-24 Jul 41 Col E.W. Hill 24 Jul 41—18 Jul 42 Col J.W. Whiteley 18 Jul 42-28 Mar 43 Maj Gen F. Bradley 28 Mar 43-13 Jul 43 Brig Gen J.W. Jones 13 Jul 43---CHIEF, LEGAL DIV, OCAC; AIR JUDGE **ADVOCATE** Col E.H. Snodgrass-head of Legal Division, OCAC, and Air Judge Advocate 20 Jun 41--3 Jul 43 Brig Gen L.H. Hedrick 3 Jul 43-11 Oct 45 (General Hedrick did not assume office as of this date, but this is the date of his order. He actually assumed office about one week later.) Col D. O'Keefe 11 Oct 45— AIR ADJUTANT GENERAL Col W.W. Dick 20 Jun 41—19 Sep 42 Col F.C. Milner 19 Sep 42—28 Sep 43 Col J.B. Cooley 29 Oct 43-15 Dec 43 (acting from 28 Sep 43—29 Oct 43) Lt Col H.H. Hewitt (acting) 15 Dec 43-27 Dec 43 Col T.A. FitzPatrick 27 Dec 43-8 May 44 (There was no Air Adjutant General between 8 May 44 and 8 Jun 45) Col H.G. Culton 8 Jun 45-

SPECIAL PROJECTS Col F.T. Davison 29 Mar 43BUDGET AND FISCAL

Lt Col L.W. Miller
(Chief of Fiscal Division,
OCAC as early as 20 Aug 41)

Lt Col A.W. Martenstein
(Asst Chief of Fiscal Division,
OCAC as early as 20 Aug 41)

Col L.W. Miller (Budget Officer)
9 Mar 42—29 Mar 43

Col A.W. Martenstein (Fiscal Officer)
9 Mar 42—29 Mar 43

Brig Gen L.W. Miller (Budget and Fiscal)
29 Mar 43—

AIR COMMUNICATIONS OFFICER
Brig Gen H.M. McClelland
26 Sep 43—

AIR SURGEON
Col-Maj Gen N.W. Grant (assigned from Medical Division, OCAC to Hq, AAF and appointed Air Surgeon)
30 Oct 41—

SPECIAL ASSISTANT FOR GLIDER PROGRAM R. DuPont 19 Apr 43—13 Sep 43

FLYING SAFETY (Office of. See also Directorate of.)
Col G.C. Price
1 Oct 43—
(Moved to Winston-Salem, N.C., 8 Feb 44)
Lt Col M. Estes (Deputy Chief and head of Washington office)
8 Feb 44—

SPECIAL ASSISTANT FOR ANTIAIRCRAFT
Maj Gen H.R. Oldfield
26 Oct 43—
OFFICE OF LEGISLATIVE SERVICES
Col W.S. Ege
11 Dec 43—

DIRECTOR OF MILITARY REQUIREMENTS
Brig Gen M.S. Fairchild
9 Mar 42—25 Nov 42
Maj Gen D. Johnson
25 Nov 42—24 Feb 43
Col M.E. Goss (acting)
25 Feb 43—14 Mar 43

Maj Gen B.M. Giles 2 9 Mar 42—9 Sep 42 15 Mar 43-29 Mar 43 (Absorbed by Air Inspector's Air Defense Office on 9 Sep. 42) Col G.P. Saville Traffic Control and Regulation 9 Mar 42-29 Mar 43 Brig Gen D.H. Connolly Bombardment. 9 Mar 42-24 Apr 42 Col E.P.-Sorensen (Became separate directorate 9 Mar 42—22 Jun 42 as Military Director of Civil Col F.L. Anderson (acting) Aviation on 24 Apr 42 and was 22 Jun 42-7 Sep 42 headed by General Connolly until Brig Gen E.L. Eubank its abolition on 15 Sep 42.) 7 Sep 42-29 Mar 43 Flying Safety Base Services Lt Col S.R. Harris Col L.P. Whitten late Apr 42-22 Dec 42 9 Mar 42-29 Mar 43 (Became special staff on 22 Aug War Organization and Movement 42 where it remained until 22 Col O.S. Ferson Dec 42 when it became a separate 9 Mar 42—17 May 42 directorate as Air Traffic and Col N.F. Twining Safety.) 6 Jun 42-24 Jun 42 Air Traffic and Safety Brig Gen H. Peabody Col S.R. Harris 24 Jun 42—11 Nov 42 22 Dec 42-29 Mar 43 Col C.A. Horn Flight Control 11 Nov 42-5 Dec 42 Lt Col G.C. Price Col F.W. Evans 22 Dec 42-29 Mar 43 5 Dec 42—29 Mar 43 Safety Education Maj R.L. Steinle Individual Training Col L.S. Smith 22 Dec 42-29 Mar 43 9 Mar 42-29 Mar 43 DÎRECTORATE OF MANAGEMENT Ground-Air Support CONTROL Col D.M. Schlatter Col B.E. Gates 9 Mar 42-19 Jan 43 10 Mar 43---28 Mar 43 Col R.L. Stearley Organizational Planning 19 Jan 43-29 Mar 43 Capt J.W. Aston DIRECTOR OF TECHNICAL SERVICES 9 Mar 42-10 Mar 43 Col R.G. Breene Lt Col J.S. Clark, Jr. 9.Mar 42-10 Jul 42 10 Mar 43-29 Mar 43 Brig Gen H.M. McClelland Statistical Control 16 Jul 42-29 Mar 43 Lt C.B. Thornton **Communications** 9 Mar 42-29 Mar 43 Col A.W. Marriner Legislative Planning 9 Mar 42-29 Mar 43 Lt Col G.R. Perera Weather 9 Mar 42-29 Mar 43 Col D.Z. Zimmerman DIRECTOR OF PERSONNEL 9 Mar 42-29 Mar 43 Col-Brig Gen J.M. Bevans Photography, Maps, and Charts 9 Mar 42—29 Mar 43 Col M.W. Kaye 9 Mar 42-29 Mar 43 PUBLIC RELATIONS OFFICER Technical Inspection Col A.I. Ennis

9 Mar 42-9 Sep 43

Col G.H. Beverley

## Glossary

<b>AAFSAT</b>	AAF School of Applied Tactics	C/AC	Chief of the Air Corps
<b>AAFTAC</b>	AAF Tactical Center	CAF	Continental Air Forces
AAG	Air Adjutant General	C/AS	Chief of Air Staff
AC	Air Corps	C/S	Chief of Staff
AC/AS	Assistant Chief of Air Staff	DC/AS	Deputy Chief of Air Staff
ACO	Air Communications Office	FM	Field Manual
AC/S	Assistant Chief of Staff	FTC	Flying Training Command
<b>AFAMS</b>	AC/AS, Materiel and Services	GHQ	General Headquarters
AFCÇ	Air Force Combat Command	GO	General Order
AFDCO	Control Office, AC/AS, Materiel and	Hq OI	Headquarters Office Instruction
	Services	IGD	Inspector General's Department
AFDMC	Management Control	ITCC	I Troop Carrier Command
<b>AFDMR</b>	Director of Military Requirements	JCS	Joint Chiefs of Staff
<b>AFMOP</b>	Organizational Planning	MM&D	Materiel, Maintenance, and
<b>AFOCR</b>	AC/AS, Operations, Commitments,		Distribution
	and Requirements	M&S	Materiel and Services
AFROM	War Organization and Movement	OCAC	Office, Chief of the Air Corps
<b>AFSHO</b>	AAF Historical Office	OCAS	Office, Chief of Air Staff
AG .	Adjutant General	<b>OCSigO</b>	Office, Chief Signal Officer
A AAF	Arms and Services with the Army Air	S/AS	Secretary of Air Staff
•	Forces	TTC	Technical Training Command
ATSC	Air Technical Service Command	WPD	War Plans Division

## Index

A .	Timu 111, 5, 5, 50, 45
A-1, 25, 29, 31, 42, 50	Fourth AF, 5, 9, 38, 43, 56
A-2, 25, 29, 42	Air Inspector, 41-42, 48, 62
A-3, 25, 29, 37, 40-42, 50	Air Judge Advocate, 32, 41-43, 45, 48, 63
A-4, 25, 29, 31, 40-42, 50	Air Provost Marshal: 61, 63; Facilities Security and Per
AAF Board, 58-59, 66	sonnel Security Branches, 43
AAF Center, 58-59, 62	Air Technical Service Command, 54, 59-60
AAF Regulations: 20-1, 63; 20-10, 50; 20-43, 60	Air Transport Command, 37-38, 42-43, 59
AAF School, 58-59	Air Transport Service, 66
	Air Service, 1, 46n
AAF Waste & Samias 54	Air Service Command, 19-20, 33, 36, 41, 43, 59
AAF Weather Service, 54	Air Staff: 9, 19-20, 23, 48-49; created, 7; sections, 25, 29
AC/AS-1, 62-63	project, 26; relationship with directorates, 40-41; policy
AC/AS-2, 62-63	50
AC/AS-3, 49, 62-63, 66	Air Surgeon, 32, 42, 63
AC/AS-4, 62-63	Air War Plans Div., 25
AC/AS-5, 62-63, 66	Air Weather Officer, 45
AC/AS, Intelligence, 43, 61	Anderson, Maj. Gen. F. L., 63
AC/AS, Management Control, 48	Andrews, Maj. Gen. Frank M.: on Air Corps stations, 3
AC/AS, Materiel, Maintenance, and Distribution, 38, 43,	attacks study, 4
59-60	Antiaircraft Officer, 45
AC/AS, Materiel and Services, 54, 59-62	Antisubmarine Command, 38, 43
A S, Operations, Commitments, and Requirements, 38,	AR 95-5, 9
51, 53-54, 57-58, 61-62, 66, 69	Arms and Services with the Army Air Forces, 55, 67
AC/AS, Organization, Training, and Requirements,	Army, 10
(prop.) 48, 61	Army Air Forces: 25-26, 36, 46, 50, 68; coordinates ai
AC/AS, Personnel, 43, 49, 61-62	activities, 7; autonomy, 8-10; responsibilities, 20, 53-55
AC/AS, Plans, 43, 51, 56	69; structure, 33, 39
AC/AS, Program Planning, 51	Army Air Traffic Services, 20, 31
AC/AS, Training, 43, 61	Army Ground Forces, 9, 54-55, 66, 68
Adjutant General, OCAC, 47	Army Service Forces, 53, 55, 66, 69
Administrative Div., 20, 26, 43	Arnold, Gen. Henry H.: 9, 20, 42, 51, 53, 57, 60; recom
Administrative Inspection, 42, 48	mends designation, 4; appointed DC/S for Air, 5
Administrative Research and Statistics Section, 19, 25,	Arnold plan, 7-8; advocates decentralization, 43; new
46-47	AAF functions, 53-54; directs changes, 61
Administrative Services, 48-49	Asst. for Personnel and Training Services, 20
Advisor for Program Control, 51	Asst. Sec. of War for Air, 1, 42, 59
Aeronautical Board, 11	Aviation Section, 1
Aeronautical Div., 1	11. Indian Section, 1
Air Adjutant General, 25, 31, 37, 42-43, 47-49	В
Air Chaplain, 43	
Air Communications Office, 53, 62	Baker, Newton D., 1n
Air Corps: 1, 48; supply arm, 2; organization, 11; Board,	Baker Board, 1
11, 24; Technical Committee, 11, 24; Field Manual, 24;	Barksdale Field, 1
Training Center, 35; Tactical School, 35; Technical	Beam, Maj. Rosenham, 2n
School, 35; Special Service schools, 35; Engineering	Bradley, Lt. Col. Follett, 2n
School, 35; School of Aviation Medicine, 35; Provi-	Brett, Maj. Gen. George H., 5, 25, 34-35
sional Maintenance Command, 36	Bowles, Edward L., 53
Air Finance Officer, 61	Brower, Lt. Col. G. E., 34
Air Force Combat Command: 8, 20, 29n, 31-32, 47-48,	Browning, Col. William S., 2n
51, under Army Air Forces, 7, 25, 36; virtually ceases	Browning Board, 2-3
to exist, 9	Bryden, Col. William, 34n
Air Forces (numbered):	Bryden Board, 34
First AF, 5, 9, 38, 41, 43, 66	Budget and Fiscal Office, 42, 48, 61-62
Sand AF, 5, 9, 38, 43	Budget Officer, 32, 41

Building and Grounds, 14, 19-20, 31 Bureau of Budget, 9, 29, 49-51

#### C

Chamberlain, Clarence D., 1n Chauncey, Maj. Gen. Charles C., 63 Chief, Army Air Forces, 7, 19-20 Chief of Air Staff, 29, 43, 47-48, 50-51, 58, 60-62, 66 Chief of Engineers, 55 Circular No. 388, 55 Civil Aeronautics Administration, 38 Civilian Personnel Div., 14, 20 Clark, Capt. Joseph S., Jr., 9 Clark, Wallace, Company, 26, 47, 49 Combined Chiefs of Staff, 10 Commanding General, AAF, 10 Commitments Div., 61 Communications, 19, 26 Communications Div., 35, 41 Communications Officer, 45 Communications Wing, 38 Compton, Karl T., 1n Continental Air Forces, 49, 57, 62, 66 Craig, Maj. Gen. H. A., 51

# Crowell Board, 1

Dargue, Brig. Gen. H. A., 46-47

Demonstration Air Force, 58

Department of National Defense, 66 Dick, Col. W. W., 37 Directorates: Air Defense, 31, 41, 43 Air Support, 43 Air Traffic and Safety, 42 Base Services, 29, 31, 41, 43 Bombardment, 31, 41, 43 Communications, 38, 43, 45 Flight Control, 42-43 Flying Safety, 38, 40, 42-43, 48 Ground Support, 31 Ground-Air Support, 41 Individual Training, 31, 37, 41, 43 Legislative Planning, 41, 47 Management Control. See Management Control. Military Requirements, 29, 31-32, 37, 41-42, 51 Organizational Planning, 41-42, 47-49, 51, 59, 69 Personnel, 31, 42-43 Safety Education, 42-43 Statistical Control, 41, 47-48, 50, 52 Technical Inspection, 42, 48 Technical Services, 31, 40-42 Traffic Control and Regulations, 38n, 40 War Organization and Movement, 29n, 31-32, 41-43 Weather, 38, 43

#### I

Eglin Field, 58-59 Emmons, Lt. Gen. Delos C., 7

Doolittle, James H., Lt. Col., 1n, 32 Drum, Maj. Gen. Hugh A., 1n Eubank, Brig. Gen. E. L., 58 Executive, 11-12, 19, 24-25

#### F

Fairchild, Brig. Gen. Muir S., 8, 26
Farrar, Capt. James M., 25
Ferrying Command, 19-20, 33, 36-37, 41
Finance Div., 11, 19
I Concentration Command, 38
I Troop Carrier Command, 57-58
Fiscal Div., 19-20
Flight Control Command, 38, 43, 45
Flight Operations Div., 61
Flying Safety Office, 45, 62
Flying Training Command, 20, 31, 33, 36-38, 41, 43
Foreign Service Concentration Command, 38
Foulois, Maj. Gen. Benjamin D., 1n
4th AA Command, 56

#### G

Gardner, Brig. Gen. Grandison, 58
Gates, Brig. Gen. Byron E.: reorganization study, 8-9; on
Clark study, 26; emphasis on planning, 47; elimination
of Management Control, 48-49
General Headquarters Air Force: 1, 7, 33, 46; responsible to, 2, 35n; and OCAC, 3, 5
Gorrell, Edgar S., 1n
Giles, Maj. Gen. B. M., 51
Gulick, Brig. Gen. John W., 1n

#### H

Handy, Lt. Gen. T. T., 57
Harrison, Lt. Col. William K., 7
Headquarters, AAF: 22, 32, 35, 40, 48-49; organized on command basis, 36-37; unfavorable comments from field, 41; new grouping, 43; proposed central program planning agency, 51; division of responsibilities with CAF, 57; reduction of agencies reporting to, 58-60; changes in, 61-67; relationship with field, 69
Headquarters Commandant, 62
Hoelscher, Leonard, 9
House, Maj. Gen. E. J., 58
House Select Committee on Post-War Military Policy, 10
HQ. O.I. 20-1, 63
Hughes, Maj. Gen. John H., 3

#### ı

Information Div., 11, 14
Inspection Div.: 9-20; Development Section, 46
Inspection Section, 11
Inspector General's Department, 41, 43, 46n
Intelligence Div.: 19-20; Evaluation Section, 14; Counter Intelligence Section, 14; Public Relations Section, 14
Intelligence Service, 42

#### J

Joint Chiefs of Staff, 10, 66

#### K

Kilbourne, Brig. Gen. Charles E., 1n Knerr, Col. Hugh J., 3

Knudsen, Lt. Gen. William S., 60 er, Brig. Gen. L. S., 51

L

Lampert Committee, 1
Langley Field,
Learned, Edmund P., 51
Legal Div., 19-20
Legislative Analysis Section of A-1, 8
Legislative Planning, 43
Legislative Services, 62
Lewis, George W., 1n
Lincoln, Col. Rush B., 24
Lovett, Robert A., 5

#### M

McDonnell, Maj. J. C., 23-24 McFayden, Col. B. M., 41-42 McNarney, Gen. J. T., 8-9 McNarney Committee, 9, 29 Management Control: 19, 31, 37n, 42-43, 50, 61; Manpower Div., 14, 43, 48-49; survey of Headquartersfield relationships, 39; Chief criticizes Air Staff, 41; propose, 46-47, 53, 57, 69, development, 46, 48-49; proposals, 48, 51, 58 March Field, 1 Marshall, Gen. George C., 7-8, 53 Mriel Command, 41, 43, 59 Mariel Div.: 11, 14; Chief of, 2; and Supply Div., 34-35; Industrial Planning Section, 35; Materiel Liaison Section, 35; Field Services Section, 36; Maintenance Section, 36 Maxwell, Maj. Gen. R. L., 54 Medical Div., 19-20 Medical Section, 12 Message and Cable Div., 43 Military Air Traffic Control Div., 42 Military Director of Civil Aviation, 38, 40, 42

#### N

Navy, 10 Nelson, Col. Otto, 9 Norstad, Maj. Gen. L. S., 63

Operational Plans Div., 61 Operations Analysis Div., 48-49

Miscellaneous Div., 12, 46

Military Personnel Div., 14, 20, 26

#### 0

Office, Chief of the Air Corps: 1, 20, 23, 25, 46-47, 55; and GHQ Air Force, 3, 5; under Army Air Forces, 7; major divisions, 11, 19; abolished, 14; operating function, 29; organization, 33, 34; materiel, 34-35; reorganized, 36.
Office of the Historian, 62
Office of Information Services, 61
Office of Legislative Services, 45
Office of Program Monitoring, 51

Operations Div., 20, 35 Operations Div., General Staff, 50 Oplando Field, 58

P

Patents Section, 19n Perera, Lt. Col. Guido R., 9 Personnel Div., 11-12, 14n, 24, 35 "Personnel Indoctrination Command," 38 Photography, 41, 43 Plans Div., 19, 23-25, 35, 41, 47; Organizational Control and Administrative Unit, 46 Plans Section, 11, 19, 26, 47 Powers, Maj. Gen. E. M., 54, 63 Procedures Section 47 Program Control Div., 51 Program Planning, 41-43 Program Planning and Control Unit, 50 Program Monitoring, 62 Proving Ground, 36 Proving Ground Command, 43, 58-59 Public Relations, 19, 32, 42 Publications Branch, 49

#### R

Randolph Field, 35 Redistribution Center, 38 Reserve Div., 11-12, 35 Rives, Brig. Gen. T. C., 54 Roosevelt, President Franklin D., 1 Royce, Lt. Col. Ralph, 2

#### 5

School of Applied Tactics, 38, 43 Selfridge Field, 2 Senate military affairs committee, 10 Services of Supply, 9 Signal Corps, 1, 54-55 Simonds, Maj. Gen. George S., 1n, 4 Smith, Bruce, 9 Somervell, Lt. Gen. Brehon B., 53 Spaatz, Maj. Gen. Carl, 7, 32 Special Asst. for Antiaircraft, 55 Special Projects, 43, 62 Special Staff, 19, 38, 42-43, 45, 62-63 Statistical Control Div., 49, 62 Statistics Section, 47 Stimson, Sec. of War Henry L., 5-6 Supply Div.: 11, 19, 46; Materiel Division Liaison, 14, 34-35

#### T

Tactical Center, 38, 58
Technical Inspection Section, 14
Technical Training Command, 20, 31, 33, 36, 38, 41, 43
Training Aids Div., 38
Training Command, 57
Training Div., 35
Training Group, 14, 35

Training Group, 14, 35
Training and Operations Div.: 14, 19, 31, 35; War Plans Section, 23-24
Troop Carrier Command, 37, 43
23d Composite Group, 24

#### W

War Department: 2, 5, 31n, 33 68; reorganization, 9; Circular No. 59, 9; on airpower, 10; intervention, 11; Manpower Board, 14; General Staff, 1, 4, 9-10, 23, 25, 35, 54, 56; Special Staff, 29 War Plans Div., 7 War Plans—Training Div., 11, 14

Weather, 41
Weather Branch, 45
Weather Div., 45
Weather Information Branch, 45
Weather Service, 62
Weather Wing, 38
Weaver, Maj. Gen. Walter R., 19-20, 36, 49
Westover, Maj. Gen. Oscar: on unity, 3; regarding GHQ
Air Force, 4
Wright, Lt. Col. J. O., 62

#### Y

Yount, Brig. Gen. B. K., 24, 35

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